



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Response

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>

Thu, Mar 28, 2024 at 9:16 AM

To: "Bell, Thomas" <Tom.Bell@specialmetals.com>, jkhetani@precastcorp.com, "Felty, Roger" <Roger.Felty@arcadis.com>

Cc: "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>

Mr. Bell,

Good morning. I apologize for not being able to get back to your comments on the draft/proposed permit sooner. At this time, the DAQ cannot make most of the corrections that you have requested. Most of the proposed corrections cannot be made because the equipment that you wish to remove from your Title V permit is still included in one of your active Rule 13 permits. What follows is a breakdown of each requested change, the DAQ's response and what needs to be done to incorporate the change.

You requested to remove the following equipment from the draft/proposed permit: TP-14-P/Arc Slicer (no longer at the facility), TP-17-P/Arc Cutter (permitted, but never constructed) and TP-18-P/Arc Cutter (permitted, but never constructed). Here is a summary of what Rule 13 permits these pieces of equipment are still included in:

<u>Emission Unit ID</u>	<u>Emission Unit</u>	<u>Year Permitted</u>	<u>Rule 13 Permit #</u>
TP-14-P	Arc Slicer	2013	R13-2532I
TP-17-P	Arc Cutter	2015	R13-2352I
TP-18-P	Arc Cutter	2015	R13-2352I

Therefore, you must apply for a combination NSR (45CSR13) Class I administrative update and Title V (45CSR30) minor modification to remove TP-14-P/Arc Slicer, TP-17-P/Arc Cutter and TP-18-P/Arc Cutter.

The other equipment that was proposed to be removed are the Main Boiler (B-1-P; installed in 1952) and the United Mill (SM-4-P; installed in 1967). It appears that these pieces of equipment are considered grand-fathered because they were installed prior to the passage of the Clean Air Act in 1970 and subsequent development of the WV NSR (Rule 13) permitting program and have not been modified since. Therefore, since these pieces of equipment are not included in a current NSR (Rule 13) permit, they may be removed at this time from the emission unit table and all other references throughout the Title V renewal permit.

In 2019, a rental boiler B-1a-P was brought on-site to replace Main Boiler B-1-P. This new boiler is a Victory Energy model number VEO-13964 constructed in 2017 and installed in 2019. This boiler is natural gas fired and has a maximum design capacity of 33.5 MMBtu/hr. The DAQ has no record of any NSR or Title V permitting actions being submitted regarding the new boiler. Has Huntington Alloys performed an internal evaluation as to whether this new boiler would require an NSR permit as a stationary source? This new rental boiler B-1a-P is subject to state rules 45CSR2 and 45CSR10 and federal regulations 40 CFR 60 Subpart Dc and 40 CFR 63 Subpart DDDDD. In accordance with 40 CFR 60 Subpart Dc, a steam generating unit that combusts natural gas is not a temporary boiler if it remains at a location for more than 180 consecutive days. Rental boiler B-1a-P will be included in the permit renewal since it is at the facility now and included in the renewal application. However, you must follow through and evaluate its applicability in regards to NSR Rule 13 permitting if this has not been done already.

I have attached the revised draft/proposed permit and fact sheet for your review. Please respond with any questions or comments. I have also forwarded them to my supervisor to review and requested permission to go to notice.

Sincerely,

Dan Roberts
 WV Department of Environmental Protection
 Division of Air Quality
 (304) 926-0499 ext. 1210
daniel.p.roberts@wv.gov

On Thu, Oct 19, 2023 at 9:49 AM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

| Tom,

Good morning. Thanks for the response and comments. I will begin reviewing and incorporating them and contact you with any questions. I will get back to you and send a revised draft permit and fact sheet once they are completed for one final review before it goes to notice.

Thanks again for your time and consideration,

Dan

On Thu, Oct 19, 2023 at 8:16 AM Bell, Thomas <Tom.Bell@specialmetals.com> wrote:

Dan,

Thank you for preparing the draft permit renewal documents. We've reviewed them and have several edits and comments in the attached files.

A main comment is that the 2023 renewal application forms did reflect equipment changes at the facility.

Specifically, these changes were:

The Main Boiler, B-1-P, was replaced with a rental Boiler, B-1a-P, in 2019. The new boiler is subject to NSPS Dc and NESHAP DDDDD.

SM-4-P, United mill, is no longer at the facility.

TP-14-P, arc slicer, is no longer at the facility.

TP-17-P and TP-18-P, arc cutters, were previously permitted for the facility but were never installed.

Our proposed draft permit edits related to these equipment changes are tracked in the attached document.

For the fact sheet, we've put in the 2022 actual emissions for the emissions summary table.

We have not had time to fully assess why the SLEIS information for total PM (TSP) appears to be incorrect. Evaluating the SLEIS TSP basis for 60+ sources will take some time and we will address that along with other SLEIS changes we are currently working on with Mike Egnor and Dave Porter of WVDEP.

For the purposes of advancing the permit renewal process, we propose that the fact sheet show 2022 TSP emissions were equal to PM10.

Please let us know if you have any questions or wish to discuss these changes.

Tom Bell

Environmental Manager HBE

Office – 304-526-5228

Cell – 304-972-8014

Mobile – 606-922-6530

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2 attachments



DPFactSheet R30-01100007-2024 3-28-24.doc
120K



DPPermit R30-01100007-2024 3-28-24.docx
382K

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30
and
Title V of the Clean Air Act

Permit Number: **R30-01100007-2024**
Application Received: **May 25, 2023**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 379.2 km Easting • 4252.30 km Northing • Zone 17
Directions: Interstate 64W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately 120 different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2022 Actual Emissions
Carbon Monoxide (CO)	267.9	71.97
Nitrogen Oxides (NO _x)	314.6	83.01
Particulate Matter (PM _{2.5})	130.9	8.65
Particulate Matter (PM ₁₀)	130.9	21.80
Total Particulate Matter (TSP)	130.9	21.80
Sulfur Dioxide (SO ₂)	8.92	3.65
Volatile Organic Compounds (VOC)	51.0	8.45

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
Nickel (Ni)	27.2	2.36
Chromium (Cr)	7.6	0.74
Hydrochloric Acid (HCl)	3.9	1.06
Hexane (C ₆ H ₁₄)	5.8	0

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 267.9 tons per year of CO, 314.6 tons per year of NO_x, 130.9 tons per year of PM₁₀ and 27.2 tons per year of nickel. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM limits on boilers
	45CSR6	Open burning prohibited.
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, administrative updates, temporary permits, general permits, permission to commence construction, and procedures for evaluation.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	HAP Emission Standards for Part 63 Sources
	40 C.F.R. 60 subpart Dc	NSPS for Small Industrial-Commercial-Institutional Steam Generating Units
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63 subpart N	Chromium Electroplating MACT
40 C.F.R. 63 subpart DDDDD	Boiler and Process Heater MACT	
40 C.F.R. 64	Compliance Assurance Monitoring	
40 C.F.R. Part 82, Subpart F	Ozone depleting substances	
State Only:	45CSR4	No objectionable odors.
	45CSR§21-30	VOC limits

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0137	March 24, 1975	
R13-1165	November 3, 1989	
R13-1646A	March 5, 2015	
R13-1767	October 17, 1994	
R13-2163A	December 20, 2010	
R13-2532I	February 25, 2016	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is the fourth renewal of the Title V Permit. There were no changes to the existing emission units and control devices with approved compliance assurance monitoring (CAM) plans, therefore, there were no changes to CAM applicability or the existing CAM plans.

The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes:

- **Condition 2.1.3.** – This condition was updated to delete the word “such” which was removed from 45CSR30 effective March 31, 2023. The reference was changed from 45CSR§30-2.12 to 45CSR§30-2.39. because the definition of “Secretary” was renumbered in a previous version of 45CSR30.
- **Condition 2.11.4.** - The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.
- **Conditions 2.17., 3.5.7. and 3.5.8.a.1.** – These conditions were deleted and replaced with “Reserved” because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it was repealed.
- **Condition 3.5.3.** - The US EPA contact information and address were updated.
- **Condition 3.5.4.** – This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- **Condition 3.5.8.a.2.** – This condition was updated to replace the word “telefax” with “email” according to the change in 45CSR30 effective March 31, 2023.

Updated Permit Language Due to Rule/Regulation Language Changes:

- **Condition 4.1.8.b.** – This condition was amended to match updated 40 CFR 63 Subpart DDDDD. In the last sentence of the paragraph, the word “Tables” was added to the phrase “Tables 11 through 13” and then 13 was changed to 15.

Updated Permit Language to Correct a Typographical Error:

- **Condition 4.5.3.c.** – In the first sentence, a typo was corrected by changing “subpart DDDD” to “subpart DDDDD.”

Changes requested in the permit renewal application:

- **Condition 1.1.** – The Emission Unit table was updated to remove Main Boiler B-1-P and United Mill SM-4-P and add Boiler B-1a-P.
- **Condition 3.7.2.a.** – This condition was updated to remove the reference to Main Boiler B-1-P and correct the verb tenses in the sentence.
- **Conditions 4.0., 4.1.1., 4.1.2., 4.1.3., 4.1.5., 4.1.6., 4.1.8, 4.2.3.a., 4.4.1., 4.5.1. and 4.5.2.** – These conditions were updated to change the references for B-1-P to B-1a-P.
- **Condition 4.1.2.** – This condition was updated to change “9.54 pounds per hour” to “5.36 pounds per hour”.
- **Condition 4.1.4.** – This condition was updated to add the reference to B-1A-P in the footnote.
- **Condition 4.1.6.** – This condition was updated to change “339.2 pounds per hour” to “190.4 pounds per hour”.
- **Condition 4.1.8.** – This condition was updated to include new Boiler B-1-P. In the first sentence of the paragraph, the phrase “requirements for existing affected sources” was modified to “requirements for new and existing affected sources” and the phrase “or upon startup for new sources” was added to the end of the sentence. In the footnote, the reference “40 CFR §§63.7495(b)” was changed to “40 CFR §§63.7495(a) and (b)”
- **Condition 4.2.1.** – This condition was updated to change the reference for “Main boiler” to “Boiler.”
- **Conditions 4.4.2. and 4.4.3** – These conditions were added for Boiler B-1a-P.
- **Conditions 4.5.4. and 4.5.5** – These conditions were added for Boiler B-1a-P.
- **Conditions 7.0 and 7.1.1.** – This condition was updated to remove United Rolling Mill SM-4-P.
- **Appendix A / Regulation 2 Monitoring Plan** – This section was updated to change the reference for “B-1” to “B-1a”, for “Main Boiler” to “Boiler”, the MMBTU/HR from 80.0 to 33.5 and the Allowable Rate from 7.2 to 3.02 #/hr.
- **Appendix A / Regulation 10 Monitoring Plan** – The section was updated to change the reference for “B-1” to “B-1a”, for “Main Boiler” to “Boiler”, the MMBTU/HR from 80.0 to 33.5 and the Allowable Rate from 7.2 to 3.02 #/hr.
-

[Appendix A / Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates](#) – The table was updated to change the reference for “B-1” to “B-1a”, for “Main Boiler” to “Boiler”, the MMBTU/HR from 80.0 to 33.5, the SO₂ Allowable lbs/hr from 248.0 to 103.9, the SO₂ Ton/yr from 0.160 to 0.006, the SO₂ Pound/Yr from 320 to 136 and the SO₂ Pound/Hr from 0.037 to 0.016.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 CFR Part 60 subpart Dc - The ~~Main Boiler and~~ V.I.M. boiler ~~were~~ was constructed before June 9, 1989 and ~~have~~ has not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

Point of Contact

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application - R30-01100007-2024

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>


Thu, Mar 28, 2024 at 8:36 AM

Carrie,

Good morning. I have incorporated the company's comments which could be incorporated at this time. These consisted of removing Main Boiler B-1-P, removing United Mill SM-4-P and adding Boiler B-1a-P. These changes are still noted in color to make it easier for you to track them. Please review the attached draft/proposed permit and fact sheet and offer any comments.

Thanks,
Dan

2 attachments

 **DPFactSheet R30-01100007-2024 3-28-24.doc**
120K

 **DPPermit R30-01100007-2024 3-28-24.docx**
382K

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Huntington Alloys Corporation
Huntington WV Facility
R30-01100007-2024

Laura M. Crowder
Director, Division of Air Quality

Issued: Draft/Proposed • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]

Permit Number: **R30-01100007-2024**
Permittee: **Huntington Alloys Corporation**
Facility Name: **Huntington WV Facility**
Permittee Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 C Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Huntington, Cabell County, West Virginia
Facility Mailing Address:	3200 Riverside Drive, Huntington, WV 25705
Telephone Number:	(304) 526-5100
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of Nickel
SIC Codes:	3356
UTM Coordinates:	379.2 km Easting \$ 4252.30 km Northing \$ Zone 17

Permit Writer: Daniel P. Roberts

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Melt Shop					
B-1 _a -P	B-1 _a -S	Main -Boiler	1952 2019	80 33.5 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B		#5 Electric Arc Furnace	1971	35,000 lbs/hr	
MS-1A		Argon Oxygen Reactor	1971	35,000 lbs/hr	
MS-1E-P		Wire Feeder	2005	70,000 lbs/hr	
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr	Baghouse PM-6 & 25- C
PM-6-P		Southwest Grinder	1974		
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr	Baghouses PM-8A-C, PM-8B-C & PM-26-C
PM-8-P		Northwest Grinder	1966		
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C

PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None
PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-4-P	SM-4-S	United Mill	1967	7,000 lbs/hr	Mist Elim. SM-4-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr	None
BW-12-P		Wire Looping Section #2	1971		
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P, CD-2-P	CD-1-S, CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P, CD-4-P	CD-3-S, CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None

CD-5-P, CD-6-P	CD-5-S, CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None
CD-7-P, CD-8-P	CD-7-S, CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P, CD-10-P	CD-9-S, CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P, CD-12-P	CD-11-S, CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P, CD-14-P	CD-13-S, CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5,708 lbs/hr	Baghouse/Cyclone CD-40-C
Carpenter Shop					
CA-1-P, CA-2-P	CA-1-S, CA-2-S	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C, Baghouse TP-7A-3C
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None

TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None
TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-14-P	TP-14-S	Arc Slicer	2013	1,500 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-17-P	TP-17-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-18-P	TP-18-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0137	March 24, 1975
R13-1165	November 3, 1989
R13-1646A	March 5, 2015
R13-1767	October 17, 1994
R13-2163A	December 20, 2010
R13-2532I	February 25, 2016

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other ~~such~~ person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12 39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.3940]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§305.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and ~~45CSR38~~]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§305.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.11. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§7-10. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.12. The permittee shall burn natural gas meeting the FERC requirements exclusively for all furnaces.

[45CSR§30-12.7.]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment,

such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 2254(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13 - R13-2163 condition 4.4.1., R13-2532 condition 5.4.1.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. **Fugitives.** The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.]

- 3.4.5. **Fugitives.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic

format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV
25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. ~~Certified emissions statement~~ **Fees.** The permittee shall ~~submit a certified emissions statement and~~ pay fees on an annual basis in accordance with ~~the submittal requirements of the Division of Air Quality 45CSR§30-8.~~ **[45CSR§30-8.]**

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. Reserved.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or ~~telefax~~ email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 CFR Part 60 subpart Dc - The ~~Main Boiler and~~ V.I.M. boiler ~~were~~ was constructed before June 9, 1989 and ~~have~~ has not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

4.0 Indirect Fired Fuel Burning Units Requirements [emission unit IDs: B-1a-P, B-4-P, SM-5-P, and CD-32-P]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. (B-1a-P, B-4-P, CD-32-P, & SM-5-P)]
- 4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: ~~9.54~~ 5.36 pounds per hour for B-1a-P and B-4-P.
[45CSR§2-4.1.b. (B-1a-P & B-4-P)]
- 4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2. (B-1a-P & B-4-P)]
- 4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (B-1a-P & B-4-P)]
- 4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2. (B-1a-P & B-4-P)]
- 4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: ~~339.2~~ 190.4 pounds per hour for B-1a-P and B-4-P.
[45CSR§10-3.3.f. (B-1a-P & B-4-P)]
- 4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

- 4.1.8. **40 CFR 63, Subpart DDDDD.** The natural gas-fired boilers B-1a-P, B-4-P, SM-5-P, and CD-32-P shall comply with all applicable requirements for new and existing affected sources, pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" no later than the existing source compliance date of January 31, 2016 or upon startup for new sources.
- a. 1. You must meet each emission limit and work practice standard in Table 3 to 40 CFR 63 subpart DDDDD that applies to your boiler, for each boiler at your source.
 2. At all times, you must operate and maintain any affected source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 14.2.11. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 4.2.3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or Tables 11 through ~~13~~ 15 to this subpart, or the operating limits in Table 4 to 40 CFR 63 subpart DDDDD.

[45CSR34; 40 CFR §§63.7495(a) and (b), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

4.2. Monitoring Requirements

- 4.2.1. The ~~Main boiler~~ Boiler, V.I.M. Boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]
- 4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]
- 4.2.3. **How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?** You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you according to the methods specified in conditions a. through c. below
- a. For boilers B-1a-P and B-4-P, that have a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in conditions i. through vi. below. You must conduct the tune-up while burning the type of fuel (or fuels

in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each annual tune-up must be no more than 13 months after the previous tune-up.

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in conditions A. through C. below,
 - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - B. A description of any corrective actions taken as a part of the tune-up; and
 - C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- b. For boilers SM-5-P and CD-32-P, that have a heat input capacity of less than 10 million Btu per hour, you must conduct a biennial tune-up of the boiler as specified in conditions a.i. through vi. to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
- c. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR34; 40 CFR §§63.7540(a)(10), (11), (13), 63.7515(d)]

4.3. Testing Requirements

- 4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c. (B-1a-P, B-4-P)]

- 4.4.2. g. 1. Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

2. As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

3. As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

[40 CFR §60.48c(g)(1)-(3) (B-1a-P)]

- 4.4.3. All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

[40 CFR §60.48c(i) (B-1a-P)]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. (B-1a-P & B-4-P)]

- 4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (B-1^a-P & B-4-P)]

- 4.5.3. a. For units that are subject only to a requirement to conduct annual, biennial, or 5-year tune-ups according to conditions 4.2.3. and 14.2.11, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs 1. through 4. below, instead of a semi-annual compliance report.
1. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in condition 4.1.8. and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in conditions 4.1.8. and 14.2.11.
 2. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
 3. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
 4. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.
- b. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
1. If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs i. through v. below.

- i. Company and Facility name and address.
 - ii. Process unit information, emissions limitations, and operating parameter limitations.
 - iii. Date of report and beginning and ending dates of the reporting period.
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to condition 4.2.3. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled or unscheduled unit shutdown.
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. You must submit all reports required by Table 9 of 40 CFR subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- [45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]**

4.5.4. a. The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

1. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
2. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.
3. The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
4. Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

[40 CFR §60.48c(a)(1)-(4) (B-1a-P)]

4.5.5. The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[40 CFR §60.48c(j) (B-1a-P)]

4.6. Compliance Plan

4.6.1. None.

5.0 Direct Fired Furnaces Requirements [emission unit IDs: PM-10A-P, PM-10B-P, PM-11-P, PM-12A-P, PM-12B-P, PM-13-P, PM-14-P, PM-15-P, PM-16-P, PM-17A-P, PM-17B-P, PM-18-P, PM-19-P, PM-23-P, PM-28-P, PM-29-P, SM-6-P, SM-7-P, BW-1A-P, BW-1B-P, BW-2-P, VM-2-P, VM-5-P, MA-4-P, MA-5-P]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§§7-3.1 and 3.2 and 45CSR13 - R13-1646 Condition 4.1.4., R13-1767 Condition B.1., and R13-2163 Condition 4.1.6.]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38
Ingot Furnace F-5	PM-13-P	11.2
Ingot Furnace F-6	PM-14-P	9
Ingot Furnace F-7	PM-15-P	9

[45CSR§7-4.1. and 45CSR13 - R13-2163 Condition 4.1.6.]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.; 45CSR13 - R13-1646 Condition 4.1.7.]

5.1.4. Emissions from the tip up furnaces shall not exceed the following:

	NO _x		SO ₂		CO		PM/PM ₁₀ /PM _{2.5}		VOCs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
MA-4-P	1.93	8.46	0.01	0.05	0.48	2.11	0.07	0.31	0.04	0.18
MA-5-P	1.45	6.34	0.01	0.04	1.22	5.33	0.11	0.48	0.08	0.35
Total	3.38	14.80	0.02	0.09	1.70	7.44	0.18	0.79	0.12	0.53

For MA-4-P and MA-5-P, compliance with the PM limits demonstrates compliance with the PM emission limits from 45CSR§7-4.1.

[45CSR13 - R13-1646, Conditions 4.1.1. & 4.1.6. and 45CSR§7-4.1.]

- 5.1.5. Natural gas consumption by the furnaces shall not exceed the following:

Furnace	Natural gas usage (cubic feet per hour)
MA-4-P	13,800
MA-5-P	14,476

[45CSR13 - R13-1646, Condition 4.1.2.]

- 5.1.6. The furnaces shall not process bars/rods in excess of the following:

Furnace	Pounds of rods/bars per hour
MA-4-P	20,000
MA-5-P	30,000

[45CSR13 - R13-1646, Condition 4.1.3.]

- 5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0×10^6 Btu/hr.

[45CSR13 - R13-1767, Condition A.1. (PM-23-P)]

- 5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

Particulates	0.075 lb/hr
Sulfur Dioxide	0.015 lb/hr
Nitrogen Oxide	2.5 lb/hr
Carbon Monoxide	0.875 lb/hr
Total Hydrocarbons	0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1767, Condition A.2. and 45CSR§7-4.1. (PM-23-P)]

- 5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.

[45CSR13 - R13-1767, Condition A.3. (PM-23-P)]

- 5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.

[45CSR13 - R13-1767, Condition A.4. (PM-23-P)]

- 5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission rate for Two Furnaces	
	lb/hr	tons/yr ⁽²⁾	lb/hr	tons/yr
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: ⁽¹⁾ Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

⁽²⁾ Annual emissions are based on an operating schedule of 8,760 hours per year.

Compliance with the PM limits demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-2163, Conditions 4.1.1. and 4.1.6. and 45CSR§7-4.1. (PM-28-P and PM-29-P)]

- 5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.

[45CSR13 - R13-2163, Condition 4.1.2. (PM-28-P and PM-29-P)]

- 5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NOx burners for each furnace not to exceed 1.25 MM Btu/hr heat input).

[45CSR13 - R13-2163, Condition 4.1.3. (PM-28-P and PM-29-P)]

- 5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).

[45CSR13 - R13-2163, Condition 4.1.4. (PM-28-P and PM-29-P)]

- 5.1.15. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-1646, Condition 4.1.5. (MA-4-P, MA-5-P)]

5.2. Monitoring Requirements

- 5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

- 5.2.2. In order to determine compliance with the opacity requirements of condition 5.1.1. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for Tip-up furnace MA-5-P.
- a. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.
 - b. Visible emissions checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.
 - c. If visible emissions are present at a source(s) the permittee shall take corrective action as soon as practicable, but within seventy-two (72) hours of the emission check. Once corrective action has been taken another observation shall be made to confirm that no visible emissions are present.

[45CSR13 - R13-1646, Condition 4.2.1.]

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

- 5.4.1. In order to determine compliance with condition 5.1.5. of this permit, the permittee shall maintain records showing the amount of natural gas fired monthly in furnaces MA-4-P and MA-5-P.
[45CSR13 - R13-1646, Condition 4.3.4.]
- 5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NOx emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767, Condition B.2. and 45CSR§30-5.1.c. (PM-23-P)]
- 5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a “Responsible Official” within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a “Responsible Official” within thirty (30) days after the end of the calendar year utilizing the Certification

of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described. **[45CSR13-R13-2163, Condition 4.4.4. (PM-28-P and PM-29-P)]**

5.4.4. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-1646, Condition 4.3.1. (MA-5-P)]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Hot Working Operations Requirements [emission unit IDs: MS-1A, MS-1D, MS-1B, MS-1E-P, MS-2, PM-1&2P, PM-3-P, PM-20-P, BW-3-P, BW-12-P, BW-10-P, BW-11-P]

6.1. Limitations and Standards

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13
Wire Feeder	MS-1E-P	
#4 Electric Arc Furnace	MS-1D	11
#5 Electric Arc Furnace	MS-1B	11
Powder Torch	MS-2	5
#1 Primary Rolling Mill	PM-1&2P	24
Plasma Torch	PM-3-P	3
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1
Scholle Saw	BW-10-P	7.1
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1. (MS-1A, MS-1B, MS-1D)]

6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 lbm/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1165, Specific Requirement (A) and 45CSR§7-4.1. (PM-20-P)]

6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.

[45CSR13 - R13-1165, Specific Requirement (B)]

6.2. Monitoring Requirements

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged into the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§10-8.2.c., 45CSR§30-5.1.c.]

6.2.3. The pressure drop through the baghouses shall be measured at the baghouse inlet and exhaust on a continuous basis. The pressure gauge, with a minimum accuracy of 0.5%, shall be calibrated quarterly and the pressure readings shall be checked daily for proper operation. The pressure drop across the baghouse shall be averaged daily. If the average falls below 2 inches of water or exceeds 8 inches of water, an excursion has occurred, and corrective action shall be taken as follows:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.2.4. Qualified personnel shall perform a weekly inspection of the baghouses in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

- 6.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 6.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 6.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 6.2.8. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 6.2.9. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 6.2.8.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 6.5.1.c for the reporting required when a QIP is implemented.
[40 CFR § 64.8; 45CSR§30-5.1.c.]

6.3. Testing Requirements

- 6.3.1. None.

6.4. Recordkeeping Requirements

- 6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]
- 6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.
[45CSR§10-8.2.c., 45CSR§30-5.1.c.]
- 6.4.3. The permittee shall record baghouse pressure drop readings taken in accordance with Section 6.2.3. of this permit on a continuous basis.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(b)(4) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.4. The permittee shall maintain records to document weekly baghouse inspections and any required maintenance.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.5. The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR § 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c., 40 C.F.R. § 64.9(b)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.5. Reporting Requirements

- 6.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.6. Compliance Plan

- 6.6.1. None.

7.0 Cold Working Operations Requirements [emission unit IDs: PM-4-P, PM-5-P, PM-25-P, PM-6-P, PM-7-P, PM-26-P, PM-8-P, SM-2-P, SM-3-P, ~~SM-4-P~~, SM-10-P, CS-1-P, CS-2-P, CS-3-P, CS-4-P, CD-17-P, CD-23-P, CD-31-P, CD-39-P, CD-40-P]

7.1. Limitations and Standards

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99
Southeast Grinder	PM-5-P	2.99
Southcentral Grinder	PM-25-P	2.99
Southwest Grinder	PM-6-P	2.99
Northeast Grinder	PM-7-P	2.99
Northcentral Grinder	PM-26-P	2.99
Northwest Grinder	PM-8-P	2.99
CAP Shot Blaster	SM-2-P	9.15
MKW Rolling Mill	SM-3-P	6.68
United Rolling Mill	SM-4-P	6.04
Schluter Grinder	CS-1-P	0.41
Norton Grinder	CS-2-P	0.85
#1 Centro-M Grinder	CS-3-P	0.77
#2 Centro-M Grinder	CS-4-P	0.78
East Cutters (3 Saws)	CD-17-P	0.43
West Cutters (3 Saws)	CD-23-P	0.57
Grind Building Saw	CD-31-P	0.72
Rod Cell Saw	CD-39-P	1.20
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163, Condition 4.1.5]

7.2. Monitoring Requirements

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.2. The water level in the scrubber system shall be measured continuously and the fan operation shall be monitored continuously. The water level switch shall be tested quarterly and the fan operation monitor shall be checked daily. The water level shall be maintained via level switch and if the water is below the acceptable level, an excursion has occurred, and an alarm shall sound to notify the operator. In the event of an excursion:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Wet Scrubber SM-2-C)]

7.2.3. Qualified personnel shall perform a daily check of the scrubber system, and a monthly inspection of the scrubber system in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.1. (Baghouse/Cyclone CD-40-C)]

- 7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.2. (Baghouse/Cyclone CD-40-C)]
- 7.2.6. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 7.2.7. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 7.2.8. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 7.2.9. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 7.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 7.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 7.5.1.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

7.3. Testing Requirements

- 7.3.1. None.

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records to document the daily checks, the monthly scrubber system inspections and any required maintenance.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

- 7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163, Condition 4.4.2.]

- 7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163, Condition 4.4.3.]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.4.4.]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163, Condition 4.4.5.]

7.5. Reporting Requirements

7.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Wet Scrubber SM-2-C)]

7.6. Compliance Plan

7.6.1. None.

8.0 Woodworking Operations Requirements [emission unit IDs: CA-1-P, CA-2-P, SC-1-P, SC-2-P]

8.1. Limitations and Standards

- 8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3
Woodcutting Operations	CA-2-P	3
Wood Saws	SC-1-P	1
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

- 8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

8.2. Monitoring Requirements

- 8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

8.3. Testing Requirements

- 8.3.1. None.

8.4. Recordkeeping Requirements

- 8.4.1. None.

8.5. Reporting Requirements

- 8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

9.0 Process Tanks Requirements [Pickling Tanks – emission unit IDs: SM-1-P, CD-1-P, CD-2-P, CD-3-P, CD-4-P, CD-5-P, CD-6-P, CD-7-P, CD-8-P, CD-9-P, CD-10-P, CD-11-P, CD-12-P, CD-13-P, CD-14-P, CD-38-P]

9.1. Limitations and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 (Pickling Tanks)]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2. (Pickling Tanks)]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1. (Pickling Tanks)]

9.2. Monitoring Requirements

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

- 9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. None.

9.5. Reporting Requirements

- 9.5.1. None.

9.6. Compliance Plan

- 9.6.1. None.

10.0 Lime Storage Requirements [emission unit ID: MS-9-P]

10.1. Limitations and Standards

- 10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]
- 10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]
- 10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

10.2. Monitoring Requirements

- 10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

- 10.3.1. None.

10.4. Recordkeeping Requirements

- 10.4.1. The permittee shall maintain the design information on the baghouse at the facility.
[45CSR§30-5.1.c.]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.

11.0 Degreaser Requirements

11.1. Limitations and Standards

- 11.1.1. The owner or operator of a cold cleaning facility shall equip the cleaner with a cover that is easily operated with one hand, if the solvent is agitated; provide a permanent, legible, conspicuous label, summarizing the operating requirements; store waste solvent in covered containers; close the cover whenever parts are not being handled in the cleaner; drain the cleaned parts until dripping ceases; and degrease only materials that are neither porous nor absorbent.

[45CSR§§21-30.3.a.1.B., 30.3.a.4, 30.3.a.5., 30.3.a.6., 30.3.a.7., 30.3.a.9. (Cold Solvent Degreasers) State-Enforceable only.]

11.2. Monitoring Requirements

- 11.2.1. None.

11.3. Testing Requirements

- 11.3.1. None.

11.4. Recordkeeping Requirements

- 11.4.1. None.

11.5. Reporting Requirements

- 11.5.1. The owner or operator of any facility containing sources subject to section 30 of 45CSR21 shall comply with the requirements of 45CSR§21-5.2. regarding reports of excess emissions.

[45CSR§21-30.6.b. State-Enforceable only.]

11.6. Compliance Plan

- 11.6.1. None.

12.0 Chrome Plating Requirements [emission unit ID: CD-36-P]

12.1. Limitations and Standards

- 12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]
- 12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]
- 12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]
- 12.1.4. *Operation and maintenance practices.* All owners or operators subject to the standards of 40 CFR 63 subpart N are subject to these work practice standards.
1.
 - i. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.
 - ii. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - iii. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 2.
 - i. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
 - ii. Based on the results of a determination made under paragraph 2.i. above, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph 3. below for that source. Revisions may be required if the Administrator finds that the plan:
 - A. Does not address a malfunction that has occurred;
 - B. Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - C. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
 3. *Operation and maintenance plan.*
 - i. The owner or operator of an affected source subject to the work practices of condition 12.1.4. shall prepare an operation and maintenance plan to be implemented no later than the compliance date.

The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in A. through E. below.

- A. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
- B. For sources using an add-on control device or monitoring equipment to comply with 40 CFR 63, subpart N, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in the following Table:

Control Technique	Operation and maintenance practices	Frequency
PBS/CMP system	Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1/quarter
	Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	1/quarter
	Visually inspect ductwork from tank to the control device to ensure there are no leaks	1/quarter
	Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	Per manufacturer

- C. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - D. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
 - E. The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63, subpart N.
- ii. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
 - iii. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph 3.i. above, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.
 - iv. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep

previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

- v. To satisfy the requirements of paragraph 3. of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

[45CSR34 and 40 C.F.R. § 63.342(f)]

- 12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.

[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

12.2. Monitoring Requirements

- 12.2.1. *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of 40 CFR 63 Subpart N shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

- a. *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of condition 12.1.3. shall comply with the monitoring requirements for composite mesh-pad systems as follows:

- i. During a performance test, the owner or operator of an affected source complying with the emission limitations in condition 12.1.3. through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1., and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in condition 12.3.1.c. An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.
- ii. The owner or operator of an affected source shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.
- iii. The owner or operator of an affected source complying with the emission limitations through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs a.i. or ii. above. To establish a new site-specific operating

parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs a.iii.A. through D. below.

- A. Determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1.b.;
- B. Establish the site-specific operating parameter value using the procedures in condition 12.3.1.c.;
- C. Satisfy the recordkeeping requirements in condition 12.4.1.6. through 12.4.1.8; and
- D. Satisfy the reporting requirements in §§63.347(d) and (f).

- iv. The requirement to operate a composite mesh-pad system within the range of pressure drop values established under conditions 12.2.1.a.i. through iii. does not apply during automatic washdown cycles of the composite mesh-pad system.

[45CSR34 and 40 CFR §§ 63.343(c), (c)(1), and (c)(3)]

12.3. Testing Requirements

- 12.3.1. a. *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures below. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 1. through 9. below. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.

- 1. A brief process description;
- 2. Sampling location description(s);
- 3. A description of sampling and analytical procedures and any modifications to standard procedures;
- 4. Test results;
- 5. Quality assurance procedures and results;
- 6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
- 7. Raw data sheets for field sampling and field and laboratory analyses;
- 8. Documentation of calculations; and
- 9. Any other information required by the test method.

- b. *Test methods.* Each owner or operator subject to the provisions of 40 CFR 63 subpart N shall use the test method identified below to demonstrate compliance with the standards in condition 12.1.3.

Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations,” appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths must demonstrate compliance with the emission limits of §63.342 by measuring the total chromium.

- c. The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with condition 12.2.1.a. may establish the pressure drop in accordance with the following guidelines:
 - i. Pressure taps shall be installed at any of the following locations:
 - A. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
 - B. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
 - C. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
 - ii. Pressure taps shall be sited at locations that are:
 - A. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
 - B. Situated such that no air infiltration at measurement site will occur that could bias the measurement.
 - iii. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
 - iv. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
 - v. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.
 - vi. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.
- [45CSR34 and 40 CFR §63.344(a), (c)(1), (d)(5)]**

12.4. Recordkeeping Requirements

- 12.4.1. The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.
 1. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
 2. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;
 3. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air

- pollution control, and monitoring equipment;
4. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
 5. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);
 6. Test reports documenting results of all performance tests;
 7. All measurements as may be necessary to determine the conditions of performance tests;
 8. Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
 9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
 10. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
 11. The total process operating time of the affected source during the reporting period;
 12. All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.
- [45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.346]**

12.5. Reporting Requirements

- 12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.
[45CSR34 and 40 C.F.R. § 63.347(a)]
- 12.5.2. *Ongoing compliance status reports for major sources.* The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.
[45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.347(g)]
- 12.5.3. *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).
[45CSR34 and 40 C.F.R. § 63.347(g)(3)]
- 12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each

monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

12.6. Compliance Plan

12.6.1. None.

13.0 Thistle Processing, LLC Requirements [emission unit IDs: TP-1P, TP-3P, TP-4P, TP-5P, TP-6P, TP-13-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

13.1. Limitations and Standards

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59
Plasma Cutter (TP-3P)	0.5	2.19
Arc Cutter 1 (TP-4P)	0.05	0.21
Arc Cutter 2 (TP-5P)	0.05	0.21
Arc Cutter 3 (TP-13-P)	0.03	0.13
Arc Cutter 4 (TP-15-P)	0.03	0.13
Arc Cutter 5 (TP-16-P)	0.03	0.13
Arc Cutter 6 (TP-17-P)	0.03	0.13
Arc Cutter 7 (TP-18-P)	0.03	0.13
Cabinet Blaster (TP-6P)	0.01	0.03
Viking Belt Blaster (TP-19-P)	0.05	0.19
Total	0.93	4.07

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1.

[45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day
Viking Belt Blaster	Pounds of Shot Used	600 pounds per day
Plasma Cutter	Pounds Cut	18,000 pounds per day
Cabinet Blasting	Pounds of Shot Used	200 pounds per day
Arc Cutting	Rods Used	3,360 per day ⁽¹⁾

⁽¹⁾ Note: This represents the amount to be used for all seven (7) arc cutters in total.

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.3. Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Condition 4.1.3.]

13.1.4. Particulate Matter emissions from the Tumble Blaster and Viking Belt Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster and Viking Belt Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Conditions 4.1.4. and 4.1.5]

13.1.5. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open

air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45CSR§7-3.1.]

- 13.1.6. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8. and 45CSR§7-5.1.]

- 13.1.7. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR13 - Permit R13-2532, Condition 4.1.9. and 45CSR§7-5.2.]

- 13.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 4.1.10. and 45CSR§13-5.11.]

13.2. Testing Requirements

- 13.2.1. None.

13.3. Monitoring and Recordkeeping Requirements

- 13.3.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1.]

- 13.3.2. For Baghouse TP-10C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

- 13.3.3. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 4.3.2.]

- 13.3.4. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 4.3.3.]

- 13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.
- b. The pounds of material cut by the plasma cutter.
- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4.]

13.4. Reporting Requirements

- 13.4.1. None.

13.5. Compliance Plan

- 13.5.1. None.

14.0 Recycled Scrap Metal Requirements [emission unit IDs: TP-2-P, TP-7A-P, TP-8A-P, TP-7B-P, TP-8B-P, TP-9-P, TP-10-P, TP-11-P, TP-12-P, TP-13-P, TP-14-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

14.1. Limitations and Standards

14.1.1. **Scrap Metal Nickel and Chromium Content.** The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.2. **Emission Point (TP-2-S) - Plasma Cutter PM and HAP Emissions.** The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Particulate Matter (PM)	0.5	1.75
Hazardous Air Pollutants (HAP) ⁽²⁾	0.43	1.49

⁽¹⁾ Based on operating the Plasma Cutter 8,760 hr/yr and an emission factor of maximum mass loss of 0.5 lb/hr and average mass loss of 0.4 lb/hr.

⁽²⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.2.]

14.1.3. **Control Equipment Guaranteed Collection Efficiencies.** The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 1 is in operation.
TP-7A-2C	Thermal Oxidizer		VOC	99	
TP-7A-3C	Baghouse		PM	99	
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal Oxidizer		VOC	99	
TP-8A-3C	Baghouse		PM	99	
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532, Condition 5.1.3.]

- 14.1.4. **Scrap Metal Processing Rates.** The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	Ton/yr	
TP-2-P	Plasma Cutter	5,000	21,900	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates.
TP-9-P	Scrap Metal Crusher	7,040 ⁽¹⁾	8,975 ⁽¹⁾	
TP-10-P	Shot/ Tumble Blaster	15,000	3,000	
TP-7A-P	Kiln 1	8,000	35,040	
TP-8A-P	Kiln 2	8,000	35,040	
TP-13-P	Arc Cutter	15,000	---	
TP-14-P	Arc Slicer	1,500	---	
TP-15-P	Arc Cutter	15,000	---	
TP-16-P	Arc Cutter	15,000	---	
TP-17-P	Arc Cutter	15,000	---	
TP-18-P	Arc Cutter	15,000	---	

⁽¹⁾ Crusher hourly and annual scrap metal processing rates cannot be increased for five (5) years from the date of issuance for R13-2532D. These rates were set here such that the 45CSR13 Modification Permitting Threshold limits of 2 lb/hr and 5 ton/yr for HAP emissions were not crossed.

[45CSR13 - Permit R13-2532, Condition 5.1.4.]

- 14.1.5. **Emission Point (TP-9-S) - Crusher PM Controls.** The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

- 14.1.6. **Emission Point (TP-9-S) - Crusher PM Emissions.** The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	1.75	2.20
⁽³⁾ Hazardous Air Pollutants (HAP)	1.49	1.90

⁽¹⁾ After controls [Electrostatic Precipitator (ESP) (Control Device ID No. TP-9-C)]. Based on an ESP control/removal efficiency of 88.3%.

⁽²⁾ Based on processing 7,040 lb/hr and 8,975 ton/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.6.]

- 14.1.7. **Maximum DHI Rates - NG Burner Equipment.** The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MMBtu/hr)	Comments
TP-11-P	TP-11-S	Wash Water Burner	0.83	Provides hot water to wash dirt, oil, & grease from scrap metal.
TP-12-P	TP-12-S	Rinse Water Burner	0.44	Provides hot water to rinse the scrap metal once it is washed.
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2	Provides indirect heat to Kiln 1 (TP-7A-P).
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2	Provides Indirect heat to Kiln 2 (TP-8A-P).
---	TP-7A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 1 (TP-7A-P). Vents into Kiln 1's exhaust stream/emission point.
---	TP-8A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 2 (TP-8A-P). Vents into Kiln 1's exhaust stream/emission point.

[45CSR13 - Permit R13-2532, Condition 5.1.7.]

- 14.1.8. **Emission Point (TP-11-S) - Wash Water Burner – NG Combustion Emissions.** Emission point (TP-11-S) associated with the Wash Water Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.3

⁽¹⁾ Based on operating the Wash Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.8.]

- 14.1.9. **Emission Point (TP-12-S) - Rinse Water Burner – NG Combustion Emissions.** Emission point (TP-12-S) associated with the Rinse Water Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

⁽¹⁾ Based on operating the Rinse Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.9.]

- 14.1.10. **Emission Point TP-10-P - Shot Blast PM Controls.** The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532, Condition 5.1.10.]

- 14.1.11. **Emission Point TP-10-P - Shot Blast PM Emissions.** Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Baghouse (Control Device TP-10-9C)]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 15,000 lb/hr and 6.00 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.11.]

- 14.1.12. **Emission Points TP-7B-P and TP-8B-P – Kiln Burners – NG Combustion Emissions.** Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.2	0.86
Carbon Monoxide (CO)	0.17	0.72

⁽¹⁾ Based on operating each Rotary Kiln Burner 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.12.]

- 14.1.13. **Emission Points TP-7A-P – Kiln 1 Exhaust Controls.** The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A-2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.13.]

- 14.1.14. **Emission Points TP-8A-P – Kiln 2 Exhaust Controls.** The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.14.]

- 14.1.15. **Emission Points TP-7A-P and TP-8A-P – Kiln Exhaust Emissions.** Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr ⁽¹⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.8	2.46
Nitrogen Oxide (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic Compounds	0.8	3.55

⁽¹⁾ After controls [one (1) Cyclone, one (1) Thermal Oxidizer, and one Baghouse per each kiln].

⁽²⁾ Based on operating each Rotary Burn-off Kiln 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.15.]

- 14.1.16. **Fuel Burning Equipment Opacity Limit – NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2.**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.16.]

- 14.1.17. **Fuel Burning Unit Emission Rate Limitation – NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.** No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type ‘b’ fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.’s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§§2-4.1. and 4.1.b.; 45CSR13 - Permit R13-2532, Condition 5.1.18]

- 14.1.18. **Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

- 14.1.19. **Process PM Emission Weight Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

- 14.1.20. **Sulfur Dioxide (SO₂) In-stack Concentration Limitation – Kiln 1 and Kiln 2 Exhausts.** No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.22.]

- 14.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 14.1.3. and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 5.1.23.]

- 14.1.22. **Emission Point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) - Arc Cutter PM & HAP Emissions.** The emission point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) associated with the Arc Cutter (TP-13-P, TP-15-P, TP-16-P, TP-17-P, and TP-18-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

14.1.23. **Emission Point (TP-14-S) - Arc Slicer PM & HAP Emissions.** The emission point (TP-14-S) associated with the Arc Slicer (TP-14-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.02	0.07
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 0.404 lb/hr and an emission factor(s) for electrode type E6011.

⁽²⁾ Based on operating 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.27.]

14.1.24. **Emission Point (TP-19-S) - Viking Belt Blaster PM & HAP Emissions.** The emission point (TP-19-S) associated with the Viking Belt Blaster (TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.05	0.19
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Internal Baghouse]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 600 lb/hr and 5.26 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.28.]

14.1.25. **40 CFR 63 Subpart DDDDD.** The natural-gas fired equipment, Wash Water, Rinse Water, Kiln 1, Kiln 2, shall comply with all applicable requirements in accordance with condition 4.1.8.

[45CSR34; 40 CFR §§63.7495(a), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

14.2. Monitoring Requirements

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shut down when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

- 14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532, Condition 5.2.1.]
- 14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532, Condition 5.2.2.]
- 14.2.4. **Commencement of operation.** The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.
[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]
- 14.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 14.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 14.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 14.2.8. **Excursions.** An excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation.
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 14.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 14.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

- 14.2.11. You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you for the equipment listed in condition 14.1.25. according to the methods specified in condition 4.2.3.a.i. through vi. You must conduct a tune-up of the boiler or process heater every 5 years. You may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new source, the first 5-year tune-up must be no later than 61 months after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

[45CSR34; 40 CFR §§63.7540(a)(10), (12), 63.7515(d)]

14.3. Testing Requirements

- 14.3.1. **Opacity Testing.** To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4. Recordkeeping Requirements

14.4.1. Records, Operation and Compliance.

- a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.
- b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.
- c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.
- d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.
- e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.
- f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.
- g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.
- h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

- 14.4.2. **Equipment Maintenance Records.** The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.3. **Certification of Information.** Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 14.1.3., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 14.1.3., the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. **Opacity Records.** The permittee shall maintain records of the monitoring data required in Section 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.9. **General recordkeeping requirements for CAM:**

- a. The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 any

activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[45CSR§30-5.1.c. and 40 C.F.R. §64.9 (b)]

14.5. Reporting Requirements

- 14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

- 14.5.2. **General reporting requirements for CAM.** A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.9(a)(2)]

- 14.5.3. You must submit reports in accordance with condition 4.5.3.

[45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]

14.6. Compliance Plan

- 14.6.1. None.

Appendix A - 45CSR2 and 45CSR10 Monitoring Plans

Regulation 2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type ‘b’ sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1a	Main-Boiler	80.0 33.5	$(\del{80.0} 33.5)(0.09) = 7.2$ 3.02 #/hr
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3$ #/hr
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 2 – Applicable Requirements:

- West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
- Main Boiler (B-1a) and VIM Boiler (B-4) have inputs of ~~80.0~~ 33.5 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Start-up and shut-down records are kept for both of these sources.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.

Regulation 10 – To Prevent and Control Air Pollution from the emission of Sulfur Oxides:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type ‘b’ sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1a	Main Boiler	80.0 33.5	$(\cancel{80.0} \ 33.5)(0.09) = 7.2$ 3.02 #/hr
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3$ #/hr
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 10 – Applicable Requirements:

- West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources are exempt from the provisions of Regulation 10 and 10A due to a MMBTU/Hr burner rating of less than 10MMBTU/Hr. These two sources burn natural gas only and do not burn a process gas that contains hydrogen sulfide.
- Main Boiler (B-1a) and VIM Boiler (B-4) have inputs of ~~80.0~~ 33.5 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources are exempt from Regulation 10 and 10A due to combustion of natural gas only and do not burn a process gas that contains hydrogen sulfide. Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Exempt from Regulation 10, section 8 testing, monitoring, recordkeeping and reporting requirements due to the combustion of natural gas only in both of these sources.

Manufacturing Process Sources - Regulation 10 Applicability

**Direct Combustion Sources – Direct Natural Gas Fired Processes
 Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates**

Huntington Alloys – Products of Natural Gas Combustion				Tons per Year - Potential to Emit – SO ₂				
Description	Emission Point #	Capacity GAS MMBTU/hr	SO ₂ **	PTE	PTE	PTE	PTE	
			Allowable lbs/hour	Sulfur Max PPM Nat. Gas	SO ₂ Ton/Year	SO ₂ Pound/Yr	SO ₂ Pound/Hr	
F-11 Reheat Fce	PM-9A	26.7	82.8	<10.0 PPM	0.053	107	0.012	
F-12- Reheat Fce	PM-9B	26.7	82.8	<10.0 PPM	0.053	107	0.012	
F-21 Forge Fce	PM-10A	8.9	27.6	<10.0 PPM	0.018	36	0.004	
F-22 Forge Fce	PM-10B	8.9	27.6	<10.0 PPM	0.018	36	0.004	
F-3 Forge Fce	PM-11	112.0	347.2	<10.0 PPM	0.224	448	0.051	
F-41 Ingot Fce	PM-12A	14.4	44.6	<10.0 PPM	0.029	58	0.007	
F-42 Ingot Fce	PM-12B	14.4	44.6	<10.0 PPM	0.029	58	0.007	
F-5 Ingot Fce	PM-13	60.0	186.0	<10.0 PPM	0.120	240	0.027	
F-6 Ingot Fce	PM-14	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-7 Ingot Fce	PM-15	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-8 Ingot Fce	PM-16	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-91 Ingot Fce	PM-17A	14.3	44.3	<10.0 PPM	0.029	57	0.007	
F-92 Ingot Fce	PM-17B	14.3	44.3	<10.0 PPM	0.029	57	0.007	
#1 CB Fce	PM-18	84.8	262.9	<10.0 PPM	0.170	339	0.039	
#2 CB Fce	PM-19	20.8	64.5	<10.0 PPM	0.042	83	0.010	
E Steckel Reheat	PM-21	19.3	59.8	<10.0 PPM	0.039	77	0.009	
W Steckel Reheat	PM-22	19.3	59.8	<10.0 PPM	0.039	77	0.009	
F-101 Forge Fce	PM-28	13.6	42.2	<10.0 PPM	0.027	54	0.006	
F-102 Forge Fce	PM-29	13.6	42.2	<10.0 PPM	0.027	54	0.006	
Tank #59 Dryer	CD-15	1.0	3.1	<10.0 PPM	0.002	4	0.000	
Drying Tank #2	CD-18	1.0	3.1	<10.0 PPM	0.002	4	0.000	
Drying Tank #3	CD-19	2.0	6.2	<10.0 PPM	0.004	8	0.001	
#2 CAF Fce	CD-20	7.0	21.7	<10.0 PPM	0.014	28	0.003	
#3 CAF Fce	CD-21	7.5	23.3	<10.0 PPM	0.015	30	0.003	
#4 CAF Fce	CD-22	6.1	18.9	<10.0 PPM	0.012	24	0.003	
#10A Fce	CD-24 (NO)	3.0	9.3	<10.0 PPM	0.006	12	0.001	
Squeeze Point	CD-25	0.5	1.6	<10.0 PPM	0.001	2	0.000	
CAP Fces	SM-9	49.5	153.5	<10.0 PPM	0.099	198	0.023	
BAL Drier	SM-11	1.0	3.1	<10.0 PPM	0.002	4	0.000	
23" Mill Fce #1	BW-1A	40.0	124.0	<10.0 PPM	0.080	160	0.018	
23" Mill Fce #2	BW-1B	40.0	124.0	<10.0 PPM	0.080	160	0.018	
Walking Beam Fce	BW-2	30.0	93.0	<10.0 PPM	0.060	120	0.014	
MS E. Ladle Rht	MS-4A	2.0	6.2	<10.0 PPM	0.004	8	0.001	
MS W. Ladle Rht	MS-4B	1.0	3.1	<10.0 PPM	0.002	4	0.000	
New W. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002	
New E. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002	
AOD Vessel Rht	MS-7	10.0	30.8	<10.0 PPM	0.020	40	0.005	
Rotary Hearth	AR-1 (NO)	4.0	12.4	<10.0 PPM	0.008	16	0.002	
Tip-Up Fce	PM-24	14.0	43.4	<10.0 PPM	0.028	56	0.006	
Stress Relief Fce	VM-1	4.5	14.0	<10.0 PPM	0.009	18	0.002	
Mold Preheat	VM-2	6.0	18.6	<10.0 PPM	0.012	24	0.003	
VIM Drying Oven	VM-3	1.4	4.3	<10.0 PPM	0.003	6	0.001	
VIM Ladle Preheat	VM-4	1.8	5.6	<10.0 PPM	0.004	7	0.001	
VIM Fce Shell Htr	VM-	1.5	4.7	<10.0 PPM	0.003	6	0.001	
Rod Heat Treat	MA-4	13.8	42.8	<10.0 PPM	0.028	55	0.006	
Plate Anneal Fce	PM-23	25.0	77.5	<10.0 PPM	0.050	100	0.011	

Direct
Fired
Sources

Indirect Fired Sources	Main Boiler	B-1a	80.0 <u>33.5</u>	248.0 <u>103.9</u>	<10.0 PPM	0.160 <u>0.006</u>	320 <u>136</u>	0.037 <u>0.016</u>
	VIM Boiler	B-4	26.0	80.6	<10.0 PPM	0.052	104	0.012
	WP Salt Bath	CD-32	7.2	22.3	<10.0 PPM	0.014	29	0.003
	CAP Salt Bath	SM-5,6,7	2.7	8.4	<10.0 PPM	0.005	11	0.001

** = MMBTU/HR X 3.1 per Regulation 10
 PTE – Based on 8,760 hours of operation
 (NO) = Not Operational

Manufacturing Process Sources - Regulation 10 Applicability

**Huntington Plant Melting Department – Electric Arc Furnaces and Argon Oxygen Decarburization Vessel
 Applicability Determination and Compliance Monitoring Method**

- These sources are covered under the Title V permit application for this facility.
- Due to the fact that these sources have the potential to emit Sulfur dioxide in amounts that exceed 500 pounds per year, a monitoring plan, as required by regulation 10 and 10A, has been instituted for these sources. The monitoring plan will identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured by the Huntington Plant analytical laboratory in total percent sulfur by weight. This number will then be directly converted to an estimated maximum monthly concentration of sulfur dioxide emitted from the dust collector. The chart below details the format of the monthly report.

**Huntington Alloys – Huntington Plant
 Regulation 10 – Sulfur Dioxide Monitoring
 Electric Arc Furnace – AOD Melting Department**

Month/Year: _____

Month	Highest Monthly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum monthly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
January			2,000
February			2,000
March			2,000
April			2,000
May			2,000
June			2,000
July			2,000
August			2,000
September			2,000
October			2,000
November			2,000
December			2,000

- Notes: (1) This value represents the highest melt/heat sulfur content observed during this reporting month from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
- (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
- (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant Cold Drawing Department – West & East Pickle House – Sulfuric Acid Pickling Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- Stack testing of Sulfuric Acid pickling processes has shown that they do not produce sulfur dioxide air emissions as a result of operations. Sulfuric Acid Pickling produces sulfuric acid (H₂SO₄) mist emissions that are not covered by Regulation 10. These sources are in compliance with the WV Office of Air Quality limitations for sulfuric acid mist emissions under Regulation 7.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant - All other production processes not previously listed Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- No other sources, other than those previously listed, have the capability of producing Sulfur Dioxide air emissions at the Huntington Facility.

Regulation 10 – Sulfur Dioxide Monitoring Electric Arc Furnace – AOD Melting Department

Quarter:	Year:
-----------------	--------------

Quarter	Highest Quarterly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum quarterly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
01-01-01 to 03-31-01			2,000
04-01-01 to 06-30-01			2,000
07-01-01 to 09-30-01			2,000
10-01-01 to 12-31-01			2,000

- Notes:
- (1) This value represents the highest melt/heat sulfur content observed during this reporting quarter from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
 - (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
 - (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

The CERTIFICATION OF DATA ACCURACY statement must be completed within thirty (30) days of the end of the reporting period. This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available upon request to the Chief or his (her) authorized representative.

I certify that, based on information and belief formed after reasonable inquiry, the statement and information contained in this quarterly report are true and accurate.

Signature:	Vice President & General Manager	
Responsible Official	Title	Date:

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30
and
Title V of the Clean Air Act

Permit Number: **R30-01100007-2024**
Application Received: **May 25, 2023**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 379.2 km Easting • 4252.30 km Northing • Zone 17
Directions: Interstate 64W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately 120 different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2022 Actual Emissions
Carbon Monoxide (CO)	267.9	71.97
Nitrogen Oxides (NO _x)	314.6	83.01
Particulate Matter (PM _{2.5})	130.9	8.65
Particulate Matter (PM ₁₀)	130.9	21.80
Total Particulate Matter (TSP)	130.9	21.80
Sulfur Dioxide (SO ₂)	8.92	3.65
Volatile Organic Compounds (VOC)	51.0	8.45

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
Nickel (Ni)	27.2	2.36
Chromium (Cr)	7.6	0.74
Hydrochloric Acid (HCl)	3.9	1.06
Hexane (C ₆ H ₁₄)	5.8	0

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 267.9 tons per year of CO, 314.6 tons per year of NO_x, 130.9 tons per year of PM₁₀ and 27.2 tons per year of nickel. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM limits on boilers
	45CSR6	Open burning prohibited.
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, administrative updates, temporary permits, general permits, permission to commence construction, and procedures for evaluation.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	HAP Emission Standards for Part 63 Sources
	40 C.F.R. 60 subpart Dc	NSPS for Small Industrial-Commercial-Institutional Steam Generating Units
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63 subpart N	Chromium Electroplating MACT
40 C.F.R. 63 subpart DDDDD	Boiler and Process Heater MACT	
40 C.F.R. 64	Compliance Assurance Monitoring	
40 C.F.R. Part 82, Subpart F	Ozone depleting substances	
State Only:	45CSR4	No objectionable odors.
	45CSR§21-30	VOC limits

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0137	March 24, 1975	
R13-1165	November 3, 1989	
R13-1646A	March 5, 2015	
R13-1767	October 17, 1994	
R13-2163A	December 20, 2010	
R13-2532I	February 25, 2016	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is the fourth renewal of the Title V Permit. There were no changes to the existing emission units and control devices with approved compliance assurance monitoring (CAM) plans, therefore, there were no changes to CAM applicability or the existing CAM plans.

The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes:

- **Condition 2.1.3.** – This condition was updated to delete the word “such” which was removed from 45CSR30 effective March 31, 2023. The reference was changed from 45CSR§30-2.12 to 45CSR§30-2.39. because the definition of “Secretary” was renumbered in a previous version of 45CSR30.
- **Condition 2.11.4.** - The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.
- **Conditions 2.17., 3.5.7. and 3.5.8.a.1.** – These conditions were deleted and replaced with “Reserved” because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it was repealed.
- **Condition 3.5.3.** - The US EPA contact information and address were updated.
- **Condition 3.5.4.** – This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- **Condition 3.5.8.a.2.** – This condition was updated to replace the word “telefax” with “email” according to the change in 45CSR30 effective March 31, 2023.

Updated Permit Language Due to Rule/Regulation Language Changes:

- **Condition 4.1.8.b.** – This condition was amended to match updated 40 CFR 63 Subpart DDDDD. In the last sentence of the paragraph, the word “Tables” was added to the phrase “Tables 11 through 13” and then 13 was changed to 15.

Updated Permit Language to Correct a Typographical Error:

- **Condition 4.5.3.c.** – In the first sentence, a typo was corrected by changing “subpart DDDD” to “subpart DDDDD.”

Changes requested in the permit renewal application:

- **Condition 1.1.** – The Emission Unit table was updated to remove Main Boiler B-1-P and United Mill SM-4-P and add Boiler B-1a-P.
- **Condition 3.7.2.a.** – This condition was updated to remove the reference to Main Boiler B-1-P and correct the verb tenses in the sentence.
- **Conditions 4.0., 4.1.1., 4.1.2., 4.1.3., 4.1.5., 4.1.6., 4.1.8, 4.2.3.a., 4.4.1., 4.5.1. and 4.5.2.** – These conditions were updated to change the references for B-1-P to B-1a-P.
- **Condition 4.1.2.** – This condition was updated to change “9.54 pounds per hour” to “5.36 pounds per hour”.
- **Condition 4.1.4.** – This condition was updated to add the reference to B-1A-P in the footnote.
- **Condition 4.1.6.** – This condition was updated to change “339.2 pounds per hour” to “190.4 pounds per hour”.
- **Condition 4.1.8.** – This condition was updated to include new Boiler B-1-P. In the first sentence of the paragraph, the phrase “requirements for existing affected sources” was modified to “requirements for new and existing affected sources” and the phrase “or upon startup for new sources” was added to the end of the sentence. In the footnote, the reference “40 CFR §§63.7495(b)” was changed to “40 CFR §§63.7495(a) and (b)”
- **Condition 4.2.1.** – This condition was updated to change the reference for “Main boiler” to “Boiler.”
- **Conditions 4.4.2. and 4.4.3** – These conditions were added for Boiler B-1a-P.
- **Conditions 4.5.4. and 4.5.5** – These conditions were added for Boiler B-1a-P.
- **Conditions 7.0 and 7.1.1.** – This condition was updated to remove United Rolling Mill SM-4-P.
- **Appendix A / Regulation 2 Monitoring Plan** – This section was updated to change the reference for “B-1” to “B-1a”, for “Main Boiler” to “Boiler”, the MMBTU/HR from 80.0 to 33.5 and the Allowable Rate from 7.2 to 3.02 #/hr.
- **Appendix A / Regulation 10 Monitoring Plan** – The section was updated to change the reference for “B-1” to “B-1a”, for “Main Boiler” to “Boiler”, the MMBTU/HR from 80.0 to 33.5 and the Allowable Rate from 7.2 to 3.02 #/hr.
-

[Appendix A / Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates – The table was updated to change the reference for “B-1” to “B-1a”, for “Main Boiler” to “Boiler”, the MMBTU/HR from 80.0 to 33.5, the SO₂ Allowable lbs/hr from 248.0 to 103.9, the SO₂ Ton/yr from 0.160 to 0.006, the SO₂ Pound/Yr from 320 to 136 and the SO₂ Pound/Hr from 0.037 to 0.016.](#)

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 CFR Part 60 subpart Dc - The ~~Main Boiler and~~ V.I.M. boiler ~~were~~ was constructed before June 9, 1989 and ~~have~~ has not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

Point of Contact

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.

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Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

HUNTINGTON ALLOYS CORPORATION

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	11/9/1928		11/9/1928	Foreign	Profit			

Organization Information			
Business Purpose	3336 - Manufacturing - Machinery Manufacturing - Engine, Turbine and Power Transmission Equip Mfg. (speed changer, industrial high-speed drive, gear, mechanical power transmission)		Capital Stock 0.0000
Charter County	Cabell	Control Number	0
Charter State	DE	Excess Acres	133116
At Will Term		Member Managed	× Close
At Will Term Years		Pa	Hi, I'm SOLO I'm here to help you launch your new LLC.
Authorized Shares	0	Y Entr	

Addresses

Type	Address
Local Office Address	3200 RIVERSIDE DRIVE HUNTINGTON, WV, 25705
Mailing Address	5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035 USA
Notice of Process Address	NATIONAL REGISTERED AGENTS, INC 5098 WASHINGTON ST W STE 407 CHARLESTON, WV, 253131561
Principal Office Address	5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035 USA
Type	Address

Officers

Type	Name/Address
Director	SHAWN R HAGEL 5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035
Director	MICHAEL J. MOSLEY 5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035
President	STEVE WRIGHT 4832 RICHMOND ROAD, SUITE 100 WARRENSVILLE HEIGHTS, OH, 44128
Secretary	RUTH A. BEYER 5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035
Treasurer	STEPHEN TACHOUET 5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035
Vice-President	JIM PUETZ 5885 MEADOWS ROAD SUITE 620 LAKE OSWEGO, OR, 97035
Type	Name/Address

DBA

DBA Name	Description	Date
HUNTINGTON ALLOYS	TRADENAME	5/28/1999
SPECIAL METALS	TRADENAME	4/24/2015

Hi, I'm SOLO I'm here to help you launch your new LLC.

SPECIAL METALS CORPORATION	TRADENAME	4/24/2015	
DBA Name	Description	Effective Date	Termination D

Name Changes	
Date	Old Name
9/27/2002	INCO ALLOYS INTERNATIONAL, INC.
Date	Old Name

Mergers				
Merger Date	Merged	Merged State	Survived	Survived State
7/2/2013	THISTLE PROCESSING LLC	WV	HUNTINGTON ALLOYS CORPORATION	DE
Merger Date	Merged	Merged State	Survived	Survived State

Date	Amendment
7/2/2013	MERGER: MERGING THISTLE PROCESSING LLC, A QUALIFIED WV LIMITED LIABILITY COMPANY WITH AND INTO HUNTINGTON ALLOYS CORPORATION, A QUALIFIED DE CORPORATION, THE SURVIVOR
9/27/2002	NAME CHANGE: FROM INCO ALLOYS INTERNATIONAL, INC.
6/7/1984	CHANGE OF NAME FROM HUNTINGTON ALLOYS, INC.
11/12/1975	CHANGE OF NAME FROM THE INTERNATIONAL NICKEL COMPANY, INC.
1/14/1975	CERTIFICATE OF INCORPORATION; ROLL 91
Date	Amendment

Annual Reports	
Filed For	
2023	Hi, I'm SOLO I'm here to help you launch your new LLC.
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Monday, March 25, 2024 — 1:53 PM

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FEIN:

Business name: HUNTINGTON ALLOYS CORPORATION

Doing business

as/Trading as:

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WorkforceWV	Unemployment Compensation	Offices of the Insurance Commissioner
-----------------------------	---	---



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Response

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "Bell, Thomas" <Tom.Bell@specialmetals.com>

Thu, Oct 19, 2023 at 9:49 AM

Tom,

Good morning. Thanks for the response and comments. I will begin reviewing and incorporating them and contact you with any questions. I will get back to you and send a revised draft permit and fact sheet once they are completed for one final review before it goes to notice.

Thanks again for your time and consideration,

Dan

On Thu, Oct 19, 2023 at 8:16 AM Bell, Thomas <Tom.Bell@specialmetals.com> wrote:

Dan,

Thank you for preparing the draft permit renewal documents. We've reviewed them and have several edits and comments in the attached files.

A main comment is that the 2023 renewal application forms did reflect equipment changes at the facility.

Specifically, these changes were:

The Main Boiler, B-1-P, was replaced with a rental Boiler, B-1a-P, in 2019. The new boiler is subject to NSPS Dc and NESHAP DDDDD.

SM-4-P, United mill, is no longer at the facility.

TP-14-P, arc slicer, is no longer at the facility.

TP-17-P and TP-18-P, arc cutters, were previously permitted for the facility but were never installed.

Our proposed draft permit edits related to these equipment changes are tracked in the attached document.

For the fact sheet, we've put in the 2022 actual emissions for the emissions summary table.

We have not had time to fully assess why the SLEIS information for total PM (TSP) appears to be incorrect. Evaluating the SLEIS TSP basis for 60+ sources will take some time and we will address that along with other SLEIS changes we are currently working on with Mike Egnor and Dave Porter of WVDEP.

For the purposes of advancing the permit renewal process, we propose that the fact sheet show 2022 TSP emissions were equal to PM10.

Please let us know if you have any questions or wish to discuss these changes.

Tom Bell

Environmental Manager HBE

Office – 304-526-5228

Cell – 304-972-8014

Mobile – 606-922-6530

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Response

1 message

Bell, Thomas <Tom.Bell@specialmetals.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

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Tom Bell

Environmental Manager HBE

Office – 304-526-5228

Cell – 304-972-8014


Mobile – 606-922-6530

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2 attachments

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117K

 **DPPermit R30-01100007-2023 10-13-23 Arcadis.docx**
387K

West Virginia Department of Environmental Protection

*Harold D. Ward
Cabinet Secretary*

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Huntington Alloys Corporation
Huntington WV Facility
R30-01100007-2023

Laura M. Crowder
Director, Division of Air Quality

*Issued: Draft/Proposed • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior
to expiration]*

Permit Number: **R30-01100007-2023**
Permittee: **Huntington Alloys Corporation**
Facility Name: **Huntington WV Facility**
Permittee Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 C Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Huntington, Cabell County, West Virginia
Facility Mailing Address:	3200 Riverside Drive, Huntington, WV 25705
Telephone Number:	(304) 526-5100
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of Nickel
SIC Codes:	3356
UTM Coordinates:	379.2 km Easting \$ 4252.30 km Northing \$ Zone 17

Permit Writer: Daniel P. Roberts

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Melt Shop					
B-1 _a -P	B-1 _a -S	Main -Boiler	1952 2019	80-33.5 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B		#5 Electric Arc Furnace	1971	35,000 lbs/hr	
MS-1A		Argon Oxygen Reactor	1971	35,000 lbs/hr	
MS-1E-P		Wire Feeder	2005	70,000 lbs/hr	
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr	Baghouse PM-6 & 25- C
PM-6-P		Southwest Grinder	1974		
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr	Baghouses PM-8A-C, PM-8B-C & PM-26-C
PM-8-P		Northwest Grinder	1966		
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C

PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None
PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-4-P	SM-4-S	United Mill	1967	7,000 lbs/hr	Mist Elim. SM-4-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr	None
BW-12-P		Wire Looping Section #2	1971		
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P, CD-2-P	CD-1-S, CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P, CD-4-P	CD-3-S, CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P, CD-6-P	CD-5-S, CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None

CD-7-P, CD-8-P	CD-7-S, CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P, CD-10-P	CD-9-S, CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P, CD-12-P	CD-11-S, CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P, CD-14-P	CD-13-S, CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5,708 lbs/hr	Baghouse/Cyclone CD- 40-C
Carpenter Shop					
CA-1-P, CA-2-P	CA-1-S, CA-2-S	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C, Baghouse TP-7A-3C
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None

TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-14-P	TP-14-S	Arc Slicer	2013	1,500 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-17-P	TP-17-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-18-P	TP-18-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0137	March 24, 1975
R13-1165	November 3, 1989
R13-1646A	March 5, 2015
R13-1767	October 17, 1994
R13-2163A	December 20, 2010
R13-2532I	February 25, 2016

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other ~~such~~ person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12 39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.3940]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§305.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and ~~45CSR38~~]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§305.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.11. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§7-10. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.12. The permittee shall burn natural gas meeting the FERC requirements exclusively for all furnaces.

[45CSR§30-12.7.]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment,

such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 2254(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13 - R13-2163 condition 4.4.1., R13-2532 condition 5.4.1.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. **Fugitives.** The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.]

- 3.4.5. **Fugitives.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic

format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV
25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. ~~Certified emissions statement~~ **Fees.** The permittee shall ~~submit a certified emissions statement and~~ pay fees on an annual basis in accordance with ~~the submittal requirements of the Division of Air Quality 45CSR§30-8.~~ **[45CSR§30-8.]**

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. Reserved.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or ~~telefax~~ email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 CFR Part 60 subpart Dc - The ~~Main Boiler and~~ V.I.M. boiler ~~were was~~ constructed before June 9, 1989 and ~~have has~~ not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

4.0 Indirect Fired Fuel Burning Units Requirements [emission unit IDs: B-1a-P, B-4-P, SM-5-P, and CD-32-P]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. (B-1a-P, B-4-P, CD-32-P, & SM-5-P)]
- 4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: ~~9.545.36~~ pounds per hour for B-1a-P and B-4-P.
[45CSR§2-4.1.b. (B-1a-P & B-4-P)]
- 4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2. (B-1a-P & B-4-P)]
- 4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (B-1a-P & B-4-P)]
- 4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2. (B-1a-P & B-4-P)]
- 4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: ~~339.2~~190.4 pounds per hour for B-1a-P and B-4-P.
[45CSR§10-3.3.f. (B-1a-P & B-4-P)]
- 4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

4.1.8. **40 CFR 63, Subpart DDDDD.** The natural gas-fired boilers B-1a-P, B-4-P, SM-5-P, and CD-32-P shall comply with all applicable requirements for new and existing affected sources, pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" no later than the existing source compliance date of January 31, 2016 or upon startup for new sources.

- a. 1. You must meet each emission limit and work practice standard in Table 3 to 40 CFR 63 subpart DDDDD that applies to your boiler, for each boiler at your source.
2. At all times, you must operate and maintain any affected source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 14.2.11. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 4.2.3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or Tables 11 through ~~13~~ 15 to this subpart, or the operating limits in Table 4 to 40 CFR 63 subpart DDDDD.

[45CSR34; 40 CFR §§63.7495(a) and (b), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

4.2. Monitoring Requirements

4.2.1. The ~~Main boiler~~Boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.

[45CSR§10-3.8.]

4.2.3. **How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?** You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you according to the methods specified in conditions a. through c. below

- a. For boilers B-1a-P and B-4-P, that have a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in conditions i. through vi. below. You must conduct the tune-up while burning the type of fuel (or fuels

in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each annual tune-up must be no more than 13 months after the previous tune-up.

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in conditions A. through C. below,
 - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - B. A description of any corrective actions taken as a part of the tune-up; and
 - C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- b. For boilers SM-5-P and CD-32-P, that have a heat input capacity of less than 10 million Btu per hour, you must conduct a biennial tune-up of the boiler as specified in conditions a.i. through vi. to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
- c. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR34; 40 CFR §§63.7540(a)(10), (11), (13), 63.7515(d)]

4.3. Testing Requirements

4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c. (B-1a-P, B-4-P)]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. (B-1a-P & B-4-P)]

- 4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
2. Excess opacity does not exceed 40%.

- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;
2. The date and time of duration (with starting and ending times) of the period of excess emissions;
3. An estimate of the mass of excess emissions discharged during the malfunction period;
4. The maximum opacity measured or observed during the malfunction;
5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (B-1a-P & B-4-P)]

- 4.5.3. a. For units that are subject only to a requirement to conduct annual, biennial, or 5-year tune-ups according to conditions 4.2.3. and 14.2.11, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs 1. through 4. below, instead of a semi-annual compliance report.
1. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in condition 4.1.8. and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in conditions 4.1.8. and 14.2.11.
 2. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
 3. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
 4. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.
- b. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
1. If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs i. through v. below.
 - i. Company and Facility name and address.
 - ii. Process unit information, emissions limitations, and operating parameter limitations.
 - iii. Date of report and beginning and ending dates of the reporting period.
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to condition 4.2.3. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled or unscheduled unit shutdown.
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. You must submit all reports required by Table 9 of 40 CFR subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- [45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]**

4.6. Compliance Plan

4.6.1. None.

5.0 Direct Fired Furnaces Requirements [emission unit IDs: PM-10A-P, PM-10B-P, PM-11-P, PM-12A-P, PM-12B-P, PM-13-P, PM-14-P, PM-15-P, PM-16-P, PM-17A-P, PM-17B-P, PM-18-P, PM-19-P, PM-23-P, PM-28-P, PM-29-P, SM-6-P, SM-7-P, BW-1A-P, BW-1B-P, BW-2-P, VM-2-P, VM-5-P, MA-4-P, MA-5-P]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§§7-3.1 and 3.2 and 45CSR13 - R13-1646 Condition 4.1.4., R13-1767 Condition B.1., and R13-2163 Condition 4.1.6.]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38
Ingot Furnace F-5	PM-13-P	11.2
Ingot Furnace F-6	PM-14-P	9
Ingot Furnace F-7	PM-15-P	9

[45CSR§7-4.1. and 45CSR13 - R13-2163 Condition 4.1.6.]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.; 45CSR13 - R13-1646 Condition 4.1.7.]

5.1.4. Emissions from the tip up furnaces shall not exceed the following:

	NO _x		SO ₂		CO		PM/PM ₁₀ /PM _{2.5}		VOCs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
MA-4-P	1.93	8.46	0.01	0.05	0.48	2.11	0.07	0.31	0.04	0.18
MA-5-P	1.45	6.34	0.01	0.04	1.22	5.33	0.11	0.48	0.08	0.35
Total	3.38	14.80	0.02	0.09	1.70	7.44	0.18	0.79	0.12	0.53

For MA-4-P and MA-5-P, compliance with the PM limits demonstrates compliance with the PM emission limits from 45CSR§7-4.1.

[45CSR13 - R13-1646, Conditions 4.1.1. & 4.1.6. and 45CSR§7-4.1.]

- 5.1.5. Natural gas consumption by the furnaces shall not exceed the following:

Furnace	Natural gas usage (cubic feet per hour)
MA-4-P	13,800
MA-5-P	14,476

[45CSR13 - R13-1646, Condition 4.1.2.]

- 5.1.6. The furnaces shall not process bars/rods in excess of the following:

Furnace	Pounds of rods/bars per hour
MA-4-P	20,000
MA-5-P	30,000

[45CSR13 - R13-1646, Condition 4.1.3.]

- 5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0 x 106 Btu/hr.

[45CSR13 - R13-1767, Condition A.1. (PM-23-P)]

- 5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

Particulates	0.075 lb/hr
Sulfur Dioxide	0.015 lb/hr
Nitrogen Oxide	2.5 lb/hr
Carbon Monoxide	0.875 lb/hr
Total Hydrocarbons	0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1767, Condition A.2. and 45CSR§7-4.1. (PM-23-P)]

- 5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.

[45CSR13 - R13-1767, Condition A.3. (PM-23-P)]

- 5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.

[45CSR13 - R13-1767, Condition A.4. (PM-23-P)]

- 5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission rate for Two Furnaces	
	lb/hr	tons/yr ⁽²⁾	lb/hr	tons/yr
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: ⁽¹⁾ Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

⁽²⁾ Annual emissions are based on an operating schedule of 8,760 hours per year.

Compliance with the PM limits demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-2163, Conditions 4.1.1. and 4.1.6. and 45CSR§7-4.1. (PM-28-P and PM-29-P)]

- 5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.

[45CSR13 - R13-2163, Condition 4.1.2. (PM-28-P and PM-29-P)]

- 5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NOx burners for each furnace not to exceed 1.25 MM Btu/hr heat input).

[45CSR13 - R13-2163, Condition 4.1.3. (PM-28-P and PM-29-P)]

- 5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).

[45CSR13 - R13-2163, Condition 4.1.4. (PM-28-P and PM-29-P)]

- 5.1.15. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-1646, Condition 4.1.5. (MA-4-P, MA-5-P)]

5.2. Monitoring Requirements

- 5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

- 5.2.2. In order to determine compliance with the opacity requirements of condition 5.1.1. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for Tip-up furnace MA-5-P.
- a. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.
 - b. Visible emissions checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.
 - c. If visible emissions are present at a source(s) the permittee shall take corrective action as soon as practicable, but within seventy-two (72) hours of the emission check. Once corrective action has been taken another observation shall be made to confirm that no visible emissions are present.

[45CSR13 - R13-1646, Condition 4.2.1.]

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

- 5.4.1. In order to determine compliance with condition 5.1.5. of this permit, the permittee shall maintain records showing the amount of natural gas fired monthly in furnaces MA-4-P and MA-5-P.
[45CSR13 - R13-1646, Condition 4.3.4.]
- 5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NO_x emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767, Condition B.2. and 45CSR§30-5.1.c. (PM-23-P)]
- 5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a “Responsible Official” within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a “Responsible Official” within thirty (30) days after the end of the calendar year utilizing the Certification

of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described. **[45CSR13-R13-2163, Condition 4.4.4. (PM-28-P and PM-29-P)]**

5.4.4. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-1646, Condition 4.3.1. (MA-5-P)]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Hot Working Operations Requirements [emission unit IDs: MS-1A, MS-1D, MS-1B, MS-1E-P, MS-2, PM-1&2P, PM-3-P, PM-20-P, BW-3-P, BW-12-P, BW-10-P, BW-11-P]

6.1. Limitations and Standards

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13
Wire Feeder	MS-1E-P	
#4 Electric Arc Furnace	MS-1D	11
#5 Electric Arc Furnace	MS-1B	11
Powder Torch	MS-2	5
#1 Primary Rolling Mill	PM-1&2P	24
Plasma Torch	PM-3-P	3
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1
Scholle Saw	BW-10-P	7.1
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1. (MS-1A, MS-1B, MS-1D)]

6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 lbm/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1165, Specific Requirement (A) and 45CSR§7-4.1. (PM-20-P)]

6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.

[45CSR13 - R13-1165, Specific Requirement (B)]

6.2. Monitoring Requirements

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged into the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§10-8.2.c., 45CSR§30-5.1.c.]

6.2.3. The pressure drop through the baghouses shall be measured at the baghouse inlet and exhaust on a continuous basis. The pressure gauge, with a minimum accuracy of 0.5%, shall be calibrated quarterly and the pressure readings shall be checked daily for proper operation. The pressure drop across the baghouse shall be averaged daily. If the average falls below 2 inches of water or exceeds 8 inches of water, an excursion has occurred, and corrective action shall be taken as follows:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.2.4. Qualified personnel shall perform a weekly inspection of the baghouses in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

- 6.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 6.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 6.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 6.2.8. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 6.2.9. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 6.2.8.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 6.5.1.c for the reporting required when a QIP is implemented.
[40 CFR § 64.8; 45CSR§30-5.1.c.]

6.3. Testing Requirements

- 6.3.1. None.

6.4. Recordkeeping Requirements

- 6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]
- 6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.
[45CSR§10-8.2.c., 45CSR§30-5.1.c.]
- 6.4.3. The permittee shall record baghouse pressure drop readings taken in accordance with Section 6.2.3. of this permit on a continuous basis.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(b)(4) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.4. The permittee shall maintain records to document weekly baghouse inspections and any required maintenance.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.5. The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR § 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c., 40 C.F.R. § 64.9(b)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.5. Reporting Requirements

- 6.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.6. Compliance Plan

- 6.6.1. None.

7.0 Cold Working Operations Requirements [emission unit IDs: PM-4-P, PM-5-P, PM-25-P, PM-6-P, PM-7-P, PM-26-P, PM-8-P, SM-2-P, SM-3-P, ~~SM-4-P~~, SM-10-P, CS-1-P, CS-2-P, CS-3-P, CS-4-P, CD-17-P, CD-23-P, CD-31-P, CD-39-P, CD-40-P]

7.1. Limitations and Standards

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99
Southeast Grinder	PM-5-P	2.99
Southcentral Grinder	PM-25-P	2.99
Southwest Grinder	PM-6-P	2.99
Northeast Grinder	PM-7-P	2.99
Northcentral Grinder	PM-26-P	2.99
Northwest Grinder	PM-8-P	2.99
CAP Shot Blaster	SM-2-P	9.15
MKW Rolling Mill	SM-3-P	6.68
United Rolling Mill	SM-4-P	6.04
Schluter Grinder	CS-1-P	0.41
Norton Grinder	CS-2-P	0.85
#1 Centro-M Grinder	CS-3-P	0.77
#2 Centro-M Grinder	CS-4-P	0.78
East Cutters (3 Saws)	CD-17-P	0.43
West Cutters (3 Saws)	CD-23-P	0.57
Grind Building Saw	CD-31-P	0.72
Rod Cell Saw	CD-39-P	1.20
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163, Condition 4.1.5]

7.2. Monitoring Requirements

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.2. The water level in the scrubber system shall be measured continuously and the fan operation shall be monitored continuously. The water level switch shall be tested quarterly and the fan operation monitor shall be checked daily. The water level shall be maintained via level switch and if the water is below the acceptable level, an excursion has occurred, and an alarm shall sound to notify the operator. In the event of an excursion:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Wet Scrubber SM-2-C)]

7.2.3. Qualified personnel shall perform a daily check of the scrubber system, and a monthly inspection of the scrubber system in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.1. (Baghouse/Cyclone CD-40-C)]

- 7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.2. (Baghouse/Cyclone CD-40-C)]
- 7.2.6. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 7.2.7. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 7.2.8. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 7.2.9. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 7.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 7.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 7.5.1.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

7.3. Testing Requirements

- 7.3.1. None.

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records to document the daily checks, the monthly scrubber system inspections and any required maintenance.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

- 7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163, Condition 4.4.2.]

- 7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163, Condition 4.4.3.]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.4.4.]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163, Condition 4.4.5.]

7.5. Reporting Requirements

7.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Wet Scrubber SM-2-C)]

7.6. Compliance Plan

7.6.1. None.

8.0 Woodworking Operations Requirements [emission unit IDs: CA-1-P, CA-2-P, SC-1-P, SC-2-P]

8.1. Limitations and Standards

- 8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3
Woodcutting Operations	CA-2-P	3
Wood Saws	SC-1-P	1
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

- 8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

8.2. Monitoring Requirements

- 8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

8.3. Testing Requirements

- 8.3.1. None.

8.4. Recordkeeping Requirements

- 8.4.1. None.

8.5. Reporting Requirements

- 8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

9.0 Process Tanks Requirements [Pickling Tanks – emission unit IDs: SM-1-P, CD-1-P, CD-2-P, CD-3-P, CD-4-P, CD-5-P, CD-6-P, CD-7-P, CD-8-P, CD-9-P, CD-10-P, CD-11-P, CD-12-P, CD-13-P, CD-14-P, CD-38-P]

9.1. Limitations and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 (Pickling Tanks)]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2. (Pickling Tanks)]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1. (Pickling Tanks)]

9.2. Monitoring Requirements

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

- 9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. None.

9.5. Reporting Requirements

- 9.5.1. None.

9.6. Compliance Plan

- 9.6.1. None.

10.0 Lime Storage Requirements [emission unit ID: MS-9-P]

10.1. Limitations and Standards

- 10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]
- 10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]
- 10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

10.2. Monitoring Requirements

- 10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

- 10.3.1. None.

10.4. Recordkeeping Requirements

- 10.4.1. The permittee shall maintain the design information on the baghouse at the facility.
[45CSR§30-5.1.c.]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.

11.0 Degreaser Requirements

11.1. Limitations and Standards

- 11.1.1. The owner or operator of a cold cleaning facility shall equip the cleaner with a cover that is easily operated with one hand, if the solvent is agitated; provide a permanent, legible, conspicuous label, summarizing the operating requirements; store waste solvent in covered containers; close the cover whenever parts are not being handled in the cleaner; drain the cleaned parts until dripping ceases; and degrease only materials that are neither porous nor absorbent.

[45CSR§§21-30.3.a.1.B., 30.3.a.4, 30.3.a.5., 30.3.a.6., 30.3.a.7., 30.3.a.9. (Cold Solvent Degreasers) State-Enforceable only.]

11.2. Monitoring Requirements

- 11.2.1. None.

11.3. Testing Requirements

- 11.3.1. None.

11.4. Recordkeeping Requirements

- 11.4.1. None.

11.5. Reporting Requirements

- 11.5.1. The owner or operator of any facility containing sources subject to section 30 of 45CSR21 shall comply with the requirements of 45CSR§21-5.2. regarding reports of excess emissions.

[45CSR§21-30.6.b. State-Enforceable only.]

11.6. Compliance Plan

- 11.6.1. None.

12.0 Chrome Plating Requirements [emission unit ID: CD-36-P]

12.1. Limitations and Standards

- 12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]
- 12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]
- 12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]
- 12.1.4. *Operation and maintenance practices.* All owners or operators subject to the standards of 40 CFR 63 subpart N are subject to these work practice standards.
1.
 - i. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.
 - ii. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - iii. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 2.
 - i. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
 - ii. Based on the results of a determination made under paragraph 2.i. above, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph 3. below for that source. Revisions may be required if the Administrator finds that the plan:
 - A. Does not address a malfunction that has occurred;
 - B. Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - C. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
 3. *Operation and maintenance plan.*
 - i. The owner or operator of an affected source subject to the work practices of condition 12.1.4. shall prepare an operation and maintenance plan to be implemented no later than the compliance date.

The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in A. through E. below.

- A. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
- B. For sources using an add-on control device or monitoring equipment to comply with 40 CFR 63, subpart N, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in the following Table:

Control Technique	Operation and maintenance practices	Frequency
PBS/CMP system	Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1/quarter
	Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	1/quarter
	Visually inspect ductwork from tank to the control device to ensure there are no leaks	1/quarter
	Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	Per manufacturer

- C. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - D. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
 - E. The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63, subpart N.
- ii. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
 - iii. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph 3.i. above, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.
 - iv. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep

previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

- v. To satisfy the requirements of paragraph 3. of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

[45CSR34 and 40 C.F.R. § 63.342(f)]

- 12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.

[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

12.2. Monitoring Requirements

- 12.2.1. *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of 40 CFR 63 Subpart N shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

- a. *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of condition 12.1.3. shall comply with the monitoring requirements for composite mesh-pad systems as follows:

- i. During a performance test, the owner or operator of an affected source complying with the emission limitations in condition 12.1.3. through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1., and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in condition 12.3.1.c. An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.
- ii. The owner or operator of an affected source shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.
- iii. The owner or operator of an affected source complying with the emission limitations through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs a.i. or ii. above. To establish a new site-specific operating

parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs a.iii.A. through D. below.

- A. Determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1.b.;
 - B. Establish the site-specific operating parameter value using the procedures in condition 12.3.1.c.;
 - C. Satisfy the recordkeeping requirements in condition 12.4.1.6. through 12.4.1.8; and
 - D. Satisfy the reporting requirements in §§63.347(d) and (f).
- iv. The requirement to operate a composite mesh-pad system within the range of pressure drop values established under conditions 12.2.1.a.i. through iii. does not apply during automatic washdown cycles of the composite mesh-pad system.

[45CSR34 and 40 CFR §§ 63.343(c), (c)(1), and (c)(3)]

12.3. Testing Requirements

- 12.3.1. a. *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures below. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 1. through 9. below. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
1. A brief process description;
 2. Sampling location description(s);
 3. A description of sampling and analytical procedures and any modifications to standard procedures;
 4. Test results;
 5. Quality assurance procedures and results;
 6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
 7. Raw data sheets for field sampling and field and laboratory analyses;
 8. Documentation of calculations; and
 9. Any other information required by the test method.
- b. *Test methods.* Each owner or operator subject to the provisions of 40 CFR 63 subpart N shall use the test method identified below to demonstrate compliance with the standards in condition 12.1.3.

Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations,” appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths must demonstrate compliance with the emission limits of §63.342 by measuring the total chromium.

- c. The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with condition 12.2.1.a. may establish the pressure drop in accordance with the following guidelines:
 - i. Pressure taps shall be installed at any of the following locations:
 - A. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
 - B. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
 - C. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
 - ii. Pressure taps shall be sited at locations that are:
 - A. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
 - B. Situated such that no air infiltration at measurement site will occur that could bias the measurement.
 - iii. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
 - iv. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
 - v. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.
 - vi. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.
- [45CSR34 and 40 CFR §63.344(a), (c)(1), (d)(5)]**

12.4. Recordkeeping Requirements

- 12.4.1. The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.
 - 1. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
 - 2. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;
 - 3. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air

- pollution control, and monitoring equipment;
4. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
 5. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);
 6. Test reports documenting results of all performance tests;
 7. All measurements as may be necessary to determine the conditions of performance tests;
 8. Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
 9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
 10. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
 11. The total process operating time of the affected source during the reporting period;
 12. All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.
- [45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.346]**

12.5. Reporting Requirements

- 12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.
[45CSR34 and 40 C.F.R. § 63.347(a)]
- 12.5.2. *Ongoing compliance status reports for major sources.* The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.
[45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.347(g)]
- 12.5.3. *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).
[45CSR34 and 40 C.F.R. § 63.347(g)(3)]
- 12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each

monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

12.6. Compliance Plan

12.6.1. None.

13.0 Thistle Processing, LLC Requirements [emission unit IDs: TP-1P, TP-3P, TP-4P, TP-5P, TP-6P, TP-13-P, TP-15-P, TP-16-P, ~~TP-17-P, TP-18-P~~, TP-19-P]

13.1. Limitations and Standards

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59
Plasma Cutter (TP-3P)	0.5	2.19
Arc Cutter 1 (TP-4P)	0.05	0.21
Arc Cutter 2 (TP-5P)	0.05	0.21
Arc Cutter 3 (TP-13-P)	0.03	0.13
Arc Cutter 4 (TP-15-P)	0.03	0.13
Arc Cutter 5 (TP-16-P)	0.03	0.13
Arc Cutter 6 (TP-17-P)	0.03	0.13
Arc Cutter 7 (TP-18-P)	0.03	0.13
Cabinet Blaster (TP-6P)	0.01	0.03
Viking Belt Blaster (TP-19-P)	0.05	0.19
Total	0.93	4.07

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1.

[45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day
Viking Belt Blaster	Pounds of Shot Used	600 pounds per day
Plasma Cutter	Pounds Cut	18,000 pounds per day
Cabinet Blasting	Pounds of Shot Used	200 pounds per day
Arc Cutting	Rods Used	3,360 per day ⁽¹⁾

⁽¹⁾ Note: This represents the amount to be used for all ~~seven-five (75)~~ arc cutters in total.

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.3. Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Condition 4.1.3.]

13.1.4. Particulate Matter emissions from the Tumble Blaster and Viking Belt Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster and Viking Belt Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Conditions 4.1.4. and 4.1.5]

13.1.5. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open

air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45CSR§7-3.1.]

- 13.1.6. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8. and 45CSR§7-5.1.]

- 13.1.7. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR13 - Permit R13-2532, Condition 4.1.9. and 45CSR§7-5.2.]

- 13.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 4.1.10. and 45CSR§13-5.11.]

13.2. Testing Requirements

- 13.2.1. None.

13.3. Monitoring and Recordkeeping Requirements

- 13.3.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1.]

- 13.3.2. For Baghouse TP-10C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

- 13.3.3. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 4.3.2.]

- 13.3.4. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 4.3.3.]

- 13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.
- b. The pounds of material cut by the plasma cutter.
- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4.]

13.4. Reporting Requirements

- 13.4.1. None.

13.5. Compliance Plan

- 13.5.1. None.

14.0 Recycled Scrap Metal Requirements [emission unit IDs: TP-2-P, TP-7A-P, TP-8A-P, TP-7B-P, TP-8B-P, TP-9-P, TP-10-P, TP-11-P, TP-12-P, TP-13-P, ~~TP-14-P~~, TP-15-P, TP-16-P, ~~TP-17-P, TP-18-P, TP-19-P~~]

14.1. Limitations and Standards

14.1.1. **Scrap Metal Nickel and Chromium Content.** The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.
[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.2. Emission Point (TP-2-S) - Plasma Cutter PM and HAP Emissions. The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Particulate Matter (PM)	0.5	1.75
Hazardous Air Pollutants (HAP) ⁽²⁾	0.43	1.49

⁽¹⁾ Based on operating the Plasma Cutter 8,760 hr/yr and an emission factor of maximum mass loss of 0.5 lb/hr and average mass loss of 0.4 lb/hr.

⁽²⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.2.]

14.1.3. **Control Equipment Guaranteed Collection Efficiencies.** The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 1 is in operation.
TP-7A-2C	Thermal Oxidizer		VOC	99	
TP-7A-3C	Baghouse		PM	99	
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal Oxidizer		VOC	99	
TP-8A-3C	Baghouse		PM	99	
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532, Condition 5.1.3.]

- 14.1.4. **Scrap Metal Processing Rates.** The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	Ton/yr	
TP-2-P	Plasma Cutter	5,000	21,900	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates.
TP-9-P	Scrap Metal Crusher	7,040 ⁽¹⁾	8,975 ⁽¹⁾	
TP-10-P	Shot/ Tumble Blaster	15,000	3,000	
TP-7A-P	Kiln 1	8,000	35,040	
TP-8A-P	Kiln 2	8,000	35,040	
TP-13-P	Arc Cutter	15,000	---	
TP-14-P	Arc Slicer	15,000	---	
TP-15-P	Arc Cutter	15,000	---	
TP-16-P	Arc Cutter	15,000	---	
TP-17-P	Arc Cutter	15,000	---	
TP-18-P	Arc Cutter	15,000	---	

⁽¹⁾ Crusher hourly and annual scrap metal processing rates cannot be increased for five (5) years from the date of issuance for R13-2532D. These rates were set here such that the 45CSR13 Modification Permitting Threshold limits of 2 lb/hr and 5 ton/yr for HAP emissions were not crossed.

[45CSR13 - Permit R13-2532, Condition 5.1.4.]

- 14.1.5. **Emission Point (TP-9-S) - Crusher PM Controls.** The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

- 14.1.6. **Emission Point (TP-9-S) - Crusher PM Emissions.** The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	1.75	2.20
⁽³⁾ Hazardous Air Pollutants (HAP)	1.49	1.90

⁽¹⁾ After controls [Electrostatic Precipitator (ESP) (Control Device ID No. TP-9-C)]. Based on an ESP control/removal efficiency of 88.3%.

⁽²⁾ Based on processing 7,040 lb/hr and 8,975 ton/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.6.]

- 14.1.7. **Maximum DHI Rates - NG Burner Equipment.** The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MMBtu/hr)	Comments
TP-11-P	TP-11-S	Wash Water Burner	0.83	Provides hot water to wash dirt, oil, & grease from scrap metal.
TP-12-P	TP-12-S	Rinse Water Burner	0.44	Provides hot water to rinse the scrap metal once it is washed.
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2	Provides indirect heat to Kiln 1 (TP-7A-P).
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2	Provides Indirect heat to Kiln 2 (TP-8A-P).
---	TP-7A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 1 (TP-7A-P). Vents into Kiln 1's exhaust stream/emission point.
---	TP-8A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 2 (TP-8A-P). Vents into Kiln 1's exhaust stream/emission point.

[45CSR13 - Permit R13-2532, Condition 5.1.7.]

- 14.1.8. **Emission Point (TP-11-S) - Wash Water Burner – NG Combustion Emissions.** Emission point (TP-11-S) associated with the Wash Water Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.3

⁽¹⁾ Based on operating the Wash Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.8.]

- 14.1.9. **Emission Point (TP-12-S) - Rinse Water Burner – NG Combustion Emissions.** Emission point (TP-12-S) associated with the Rinse Water Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

⁽¹⁾ Based on operating the Rinse Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.9.]

- 14.1.10. **Emission Point TP-10-P - Shot Blast PM Controls.** The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532, Condition 5.1.10.]

- 14.1.11. **Emission Point TP-10-P - Shot Blast PM Emissions.** Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Baghouse (Control Device TP-10-9C)]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 15,000 lb/hr and 6.00 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.11.]

- 14.1.12. **Emission Points TP-7B-P and TP-8B-P – Kiln Burners – NG Combustion Emissions.** Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.2	0.86
Carbon Monoxide (CO)	0.17	0.72

⁽¹⁾ Based on operating each Rotary Kiln Burner 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.12.]

- 14.1.13. **Emission Points TP-7A-P – Kiln 1 Exhaust Controls.** The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A-2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.13.]

- 14.1.14. **Emission Points TP-8A-P – Kiln 2 Exhaust Controls.** The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.14.]

- 14.1.15. **Emission Points TP-7A-P and TP-8A-P – Kiln Exhaust Emissions.** Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr ⁽¹⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.8	2.46
Nitrogen Oxide (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic Compounds	0.8	3.55

⁽¹⁾ After controls [one (1) Cyclone, one (1) Thermal Oxidizer, and one Baghouse per each kiln].

⁽²⁾ Based on operating each Rotary Burn-off Kiln 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.15.]

- 14.1.16. **Fuel Burning Equipment Opacity Limit – NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2.**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.16.]

- 14.1.17. **Fuel Burning Unit Emission Rate Limitation – NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.** No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type ‘b’ fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.’s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§§2-4.1. and 4.1.b.; 45CSR13 - Permit R13-2532, Condition 5.1.18]

- 14.1.18. **Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter, ~~Arc Slicer~~.** No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

- 14.1.19. **Process PM Emission Weight Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter, ~~Arc Slicer~~.** No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

- 14.1.20. **Sulfur Dioxide (SO₂) In-stack Concentration Limitation – Kiln 1 and Kiln 2 Exhausts.** No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.22.]

- 14.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 14.1.3. and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 5.1.23.]

- 14.1.22. **Emission Point (TP-13-S, TP-15-S, TP-16-S, ~~TP-17-S, and TP-18-S~~) - Arc Cutter PM & HAP Emissions.** The emission point (TP-13-S, TP-15-S, TP-16-S, ~~TP-17-S, and TP-18-S~~) associated with the Arc Cutter (TP-13-P, TP-15-P, TP-16-P, ~~TP-17-P, and TP-18-P~~) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

- 14.1.23. ~~Emission Point (TP-14-S) – Arc Slicer PM & HAP Emissions.~~ The emission point (TP-14-S) associated with the Arc Slicer (TP-14-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽⁴⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.02	0.07
Hazardous Air Pollutants (HAP)	0.01	0.01

~~⁽⁴⁾ Based on a welding rod usage rate of 0.404 lb/hr and an emission factor(s) for electrode type E6011.~~

~~⁽²⁾ Based on operating 8,760 hr/yr~~

~~[45CSR13 – Permit R13-2532, Condition 5.1.27.]~~

- 14.1.24. **Emission Point (TP-19-S) - Viking Belt Blaster PM & HAP Emissions.** The emission point (TP-19-S) associated with the Viking Belt Blaster (TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.05	0.19
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Internal Baghouse]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 600 lb/hr and 5.26 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.28.]

- 14.1.25. **40 CFR 63 Subpart DDDDD.** The natural-gas fired equipment, Wash Water, Rinse Water, Kiln 1, Kiln 2, shall comply with all applicable requirements in accordance with condition 4.1.8.

[45CSR34; 40 CFR §§63.7495(a), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

14.2. Monitoring Requirements

- 14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer’s chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shut down when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

- 14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532, Condition 5.2.1.]
- 14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532, Condition 5.2.2.]
- 14.2.4. **Commencement of operation.** The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.
[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]
- 14.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 14.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 14.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 14.2.8. **Excursions.** An excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation.
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 14.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 14.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

- 14.2.11. You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you for the equipment listed in condition 14.1.25. according to the methods specified in condition 4.2.3.a.i. through vi. You must conduct a tune-up of the boiler or process heater every 5 years. You may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new source, the first 5-year tune-up must be no later than 61 months after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

[45CSR34; 40 CFR §§63.7540(a)(10), (12), 63.7515(d)]

14.3. Testing Requirements

- 14.3.1. **Opacity Testing.** To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4. Recordkeeping Requirements

14.4.1. Records, Operation and Compliance.

- a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.
- b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.
- c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.
- d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.
- e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.
- f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.
- g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.
- h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

- 14.4.2. **Equipment Maintenance Records.** The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.3. **Certification of Information.** Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 14.1.3., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 14.1.3., the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. **Opacity Records.** The permittee shall maintain records of the monitoring data required in Section 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.9. **General recordkeeping requirements for CAM:**

- a. The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 any

activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[45CSR§30-5.1.c. and 40 C.F.R. §64.9 (b)]

14.5. Reporting Requirements

- 14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

- 14.5.2. **General reporting requirements for CAM.** A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.9(a)(2)]

- 14.5.3. You must submit reports in accordance with condition 4.5.3.

[45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]

14.6. Compliance Plan

- 14.6.1. None.

Appendix A - 45CSR2 and 45CSR10 Monitoring Plans

Regulation 2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type ‘b’ sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1a	Main-Boiler	80.033.5	$(80.033.5)(0.09) = 7.23.02$ #/hr
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3$ #/hr
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 2 – Applicable Requirements:

- West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
- Main-Boiler (B-1a) and VIM Boiler (B-4) have inputs of 80.033.5 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Start-up and shut-down records are kept for both of these sources.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.

Regulation 10 – To Prevent and Control Air Pollution from the emission of Sulfur Oxides:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type ‘b’ sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1a	Main-Boiler	80.033.5	(80.033.5)(0.09) = 7.23.02 #/hr
B – 4	VIM Boiler	26.0	(26.0)(0.09) = 2.3 #/hr
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 10 – Applicable Requirements:

- West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources are exempt from the provisions of Regulation 10 and 10A due to a MMBTU/Hr burner rating of less than 10MMBTU/Hr. These two sources burn natural gas only and do not burn a process gas that contains hydrogen sulfide.
- Main-Boiler (B-1a) and VIM Boiler (B-4) have inputs of 80.033.5 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources are exempt from Regulation 10 and 10A due to combustion of natural gas only and do not burn a process gas that contains hydrogen sulfide. Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Exempt from Regulation 10, section 8 testing, monitoring, recordkeeping and reporting requirements due to the combustion of natural gas only in both of these sources.

Manufacturing Process Sources - Regulation 10 Applicability

**Direct Combustion Sources – Direct Natural Gas Fired Processes
 Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates**

Huntington Alloys – Products of Natural Gas Combustion				Tons per Year - Potential to Emit – SO ₂				
Description	Emission Point #	Capacity GAS MMBTU/hr	SO ₂ **	PTE	PTE	PTE	PTE	
			Allowable lbs/hour	Sulfur Max PPM Nat. Gas	SO ₂ Ton/Year	SO ₂ Pound/Yr	SO ₂ Pound/Hr	
F-11 Reheat Fce	PM-9A	26.7	82.8	<10.0 PPM	0.053	107	0.012	
F-12- Reheat Fce	PM-9B	26.7	82.8	<10.0 PPM	0.053	107	0.012	
F-21 Forge Fce	PM-10A	8.9	27.6	<10.0 PPM	0.018	36	0.004	
F-22 Forge Fce	PM-10B	8.9	27.6	<10.0 PPM	0.018	36	0.004	
F-3 Forge Fce	PM-11	112.0	347.2	<10.0 PPM	0.224	448	0.051	
F-41 Ingot Fce	PM-12A	14.4	44.6	<10.0 PPM	0.029	58	0.007	
F-42 Ingot Fce	PM-12B	14.4	44.6	<10.0 PPM	0.029	58	0.007	
F-5 Ingot Fce	PM-13	60.0	186.0	<10.0 PPM	0.120	240	0.027	
F-6 Ingot Fce	PM-14	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-7 Ingot Fce	PM-15	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-8 Ingot Fce	PM-16	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-91 Ingot Fce	PM-17A	14.3	44.3	<10.0 PPM	0.029	57	0.007	
F-92 Ingot Fce	PM-17B	14.3	44.3	<10.0 PPM	0.029	57	0.007	
#1 CB Fce	PM-18	84.8	262.9	<10.0 PPM	0.170	339	0.039	
#2 CB Fce	PM-19	20.8	64.5	<10.0 PPM	0.042	83	0.010	
E Steckel Reheat	PM-21	19.3	59.8	<10.0 PPM	0.039	77	0.009	
W Steckel Reheat	PM-22	19.3	59.8	<10.0 PPM	0.039	77	0.009	
F-101 Forge Fce	PM-28	13.6	42.2	<10.0 PPM	0.027	54	0.006	
F-102 Forge Fce	PM-29	13.6	42.2	<10.0 PPM	0.027	54	0.006	
Tank #59 Dryer	CD-15	1.0	3.1	<10.0 PPM	0.002	4	0.000	
Drying Tank #2	CD-18	1.0	3.1	<10.0 PPM	0.002	4	0.000	
Drying Tank #3	CD-19	2.0	6.2	<10.0 PPM	0.004	8	0.001	
#2 CAF Fce	CD-20	7.0	21.7	<10.0 PPM	0.014	28	0.003	
#3 CAF Fce	CD-21	7.5	23.3	<10.0 PPM	0.015	30	0.003	
#4 CAF Fce	CD-22	6.1	18.9	<10.0 PPM	0.012	24	0.003	
#10A Fce	CD-24 (NO)	3.0	9.3	<10.0 PPM	0.006	12	0.001	
Squeeze Point	CD-25	0.5	1.6	<10.0 PPM	0.001	2	0.000	
CAP Fces	SM-9	49.5	153.5	<10.0 PPM	0.099	198	0.023	
BAL Drier	SM-11	1.0	3.1	<10.0 PPM	0.002	4	0.000	
23" Mill Fce #1	BW-1A	40.0	124.0	<10.0 PPM	0.080	160	0.018	
23" Mill Fce #2	BW-1B	40.0	124.0	<10.0 PPM	0.080	160	0.018	
Walking Beam Fce	BW-2	30.0	93.0	<10.0 PPM	0.060	120	0.014	
MS E. Ladle Rht	MS-4A	2.0	6.2	<10.0 PPM	0.004	8	0.001	
MS W. Ladle Rht	MS-4B	1.0	3.1	<10.0 PPM	0.002	4	0.000	
New W. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002	
New E. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002	
AOD Vessel Rht	MS-7	10.0	30.8	<10.0 PPM	0.020	40	0.005	
Rotary Hearth	AR-1 (NO)	4.0	12.4	<10.0 PPM	0.008	16	0.002	
Tip-Up Fce	PM-24	14.0	43.4	<10.0 PPM	0.028	56	0.006	
Stress Relief Fce	VM-1	4.5	14.0	<10.0 PPM	0.009	18	0.002	
Mold Preheat	VM-2	6.0	18.6	<10.0 PPM	0.012	24	0.003	
VIM Drying Oven	VM-3	1.4	4.3	<10.0 PPM	0.003	6	0.001	
VIM Ladle Preheat	VM-4	1.8	5.6	<10.0 PPM	0.004	7	0.001	
VIM Fce Shell Htr	VM-	1.5	4.7	<10.0 PPM	0.003	6	0.001	
Rod Heat Treat	MA-4	13.8	42.8	<10.0 PPM	0.028	55	0.006	
Plate Anneal Fce	PM-23	25.0	77.5	<10.0 PPM	0.050	100	0.011	

Direct
Fired
Sources

Indirect Fired Sources	Main Boiler	B-1 a	80.033.5	248.0103.9	<10.0 PPM	0.1600.06 8	320136	0.0370.01 6
	VIM Boiler	B-4	26.0	80.6	<10.0 PPM	0.052	104	0.012
	WP Salt Bath	CD-32	7.2	22.3	<10.0 PPM	0.014	29	0.003
	CAP Salt Bath	SM-5,6,7	2.7	8.4	<10.0 PPM	0.005	11	0.001

** = MMBTU/HR X 3.1 per Regulation 10

PTE – Based on 8,760 hours of operation

(NO) = Not Operational

Manufacturing Process Sources - Regulation 10 Applicability

**Huntington Plant Melting Department – Electric Arc Furnaces and Argon Oxygen Decarburization Vessel
 Applicability Determination and Compliance Monitoring Method**

- These sources are covered under the Title V permit application for this facility.
- Due to the fact that these sources have the potential to emit Sulfur dioxide in amounts that exceed 500 pounds per year, a monitoring plan, as required by regulation 10 and 10A, has been instituted for these sources. The monitoring plan will identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured by the Huntington Plant analytical laboratory in total percent sulfur by weight. This number will then be directly converted to an estimated maximum monthly concentration of sulfur dioxide emitted from the dust collector. The chart below details the format of the monthly report.

**Huntington Alloys – Huntington Plant
 Regulation 10 – Sulfur Dioxide Monitoring
 Electric Arc Furnace – AOD Melting Department**

Month/Year: _____

Month	Highest Monthly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum monthly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
January			2,000
February			2,000
March			2,000
April			2,000
May			2,000
June			2,000
July			2,000
August			2,000
September			2,000
October			2,000
November			2,000
December			2,000

- Notes: (1) This value represents the highest melt/heat sulfur content observed during this reporting month from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
- (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
- (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant Cold Drawing Department – West & East Pickle House – Sulfuric Acid Pickling Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- Stack testing of Sulfuric Acid pickling processes has shown that they do not produce sulfur dioxide air emissions as a result of operations. Sulfuric Acid Pickling produces sulfuric acid (H₂SO₄) mist emissions that are not covered by Regulation 10. These sources are in compliance with the WV Office of Air Quality limitations for sulfuric acid mist emissions under Regulation 7.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant - All other production processes not previously listed Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- No other sources, other than those previously listed, have the capability of producing Sulfur Dioxide air emissions at the Huntington Facility.

Regulation 10 – Sulfur Dioxide Monitoring Electric Arc Furnace – AOD Melting Department

Quarter:	Year:
-----------------	--------------

Quarter	Highest Quarterly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum quarterly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
01-01-01 to 03-31-01			2,000
04-01-01 to 06-30-01			2,000
07-01-01 to 09-30-01			2,000
10-01-01 to 12-31-01			2,000

- Notes:
- (1) This value represents the highest melt/heat sulfur content observed during this reporting quarter from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
 - (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
 - (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

The CERTIFICATION OF DATA ACCURACY statement must be completed within thirty (30) days of the end of the reporting period. This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available upon request to the Chief or his (her) authorized representative.

I certify that, based on information and belief formed after reasonable inquiry, the statement and information contained in this quarterly report are true and accurate.

Signature:	Vice President & General Manager	
Responsible Official	Title	Date:

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30
and
Title V of the Clean Air Act

Permit Number: **R30-01100007-2023**
Application Received: **May 25, 2023**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 379.2 km Easting • 4252.30 km Northing • Zone 17
Directions: Interstate 64W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately 120 different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions		2022 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Carbon Monoxide (CO)	182.6	267.9	71.97
Nitrogen Oxides (NO _x)	636.9	314.6	83.01
Particulate Matter (PM _{2.5})	1093.9	130.9	41.198.65
Particulate Matter (PM ₁₀)	1093.9	130.9	30.2621.80
Total Particulate Matter (TSP)	1278.4	130.9	21.2521.80
Sulfur Dioxide (SO ₂)	8.92	8.92	3.65
Volatile Organic Compounds (VOC)	53.9	51.0	8.45

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions		2022 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Nickel (Ni)	190.8	27.2	6.602.36
Chromium (Cr)	56.0	7.6	2.060.74
Hydrochloric Acid (HCl)	20.0	3.9	1.06
Hexane (C6H14)	5.8	5.8	0

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 182.6 tons per year of CO, 636.9 tons per year of NO_x, 1093.9 tons per year of PM₁₀, 190.8 tons per year of nickel, 56.0 tons per year of chromium, and 20.0 tons per year of hydrochloric acid. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR2 PM limits on boilers

	45CSR6	Open burning prohibited.
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, administrative updates, temporary permits, general permits, permission to commence construction, and procedures for evaluation.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	HAP Emission Standards for Part 63 Sources
	40 C.F.R. Part 60	Industrial boiler NSPS
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 CFR 63 subpart N	Chromium Electroplating MACT
	40 CFR 63 subpart DDDDD	Boiler and Process Heater MACT
	40 CFR 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR§21-30	VOC limits

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0137	March 24, 1975	
R13-1165	November 3, 1989	
R13-1646A	March 5, 2015	
R13-1767	October 17, 1994	
R13-2163A	December 20, 2010	
R13-2532I	February 25, 2016	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is the fourth renewal of the Title V Permit. Since there were no changes to the emission units or control devices, there were no changes to CAM applicability or the existing CAM plans. The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes:

- **Condition 2.1.3.** – This condition was updated to delete the word “such” which was removed from 45CSR30 effective March 31, 2023. The reference was changed from 45CSR§30-2.12 to 45CSR§30-2.39. because the definition of “Secretary” was renumbered in a previous version of 45CSR30.
- **Condition 2.11.4.** - The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.
- **Conditions 2.17., 3.5.7. and 3.5.8.a.1.** – These conditions were deleted and replaced with “Reserved” because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it was repealed.
- **Condition 3.5.3.** - The US EPA contact information and address were updated.
- **Condition 3.5.4.** – This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- **Condition 3.5.8.a.2.** – This condition was updated to replace the word “telefax” with “email” according to the change in 45CSR30 effective March 31, 2023.

Updated Permit Language Due to Rule/Regulation Language Changes:

- **Condition 4.1.8.b.** – This condition was amended to match updated 40 CFR 63 Subpart DDDDD. In the last sentence of the paragraph, the word “Tables” was added to the phrase “Tables 11 through 13” and then 13 was changed to 15.

Updated Permit Language to Correct a Typographical Error:

- **Condition 4.5.3.c.** – In the first sentence, a typo was corrected by changing “subpart DDDD” to “subpart DDDDD.”

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 CFR Part 60 subpart Dc - The ~~Main Boiler and~~ V.I.M. boiler ~~were was~~ constructed before June 9, 1989 and ~~have has~~ not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

Point of Contact

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application - R30-01100007-2023

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>

Fri, Oct 13, 2023 at 6:51 PM

To: jkhetani@precastcorp.com

Cc: tom.bell@specialmetals.com, "Feltz, Roger" <Roger.Feltz@arcadis.com>, "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>

Mr. Khetani,

Good afternoon. I received comments from my supervisor on the draft/proposed permit and fact sheet and have addressed them. I have attached revised documents dated 10-13-23 for your review.

In addition to the question I had posed previously, I have one additional question that needs to be addressed. In the draft/proposed fact sheet, the Plantwide Emissions Summary Table lists the 2022 actual emissions in the right hand column. These emissions are obtained from what is submitted to SLEIS and assembled in an annual emissions inventory report. This report lists PM-CON (PM Condensable), PM-FIL (PM Filterable), PM10-FIL (PM10 Filterable) and PM2.5-FIL (PM2.5 Filterable). PM-CON and PM-FIL are added together to get the total PM (or TSP). PM-10 is a subset of total PM as is PM2.5. Therefore, PM2.5 can only be smaller than or equal to PM10 and PM10 can only be smaller than or equal to the total PM. However, the total emissions reported for and under review for 2022 are as follows:

PM2.5-FIL - 11.18585 tons

PM10-FIL - 30.25833 tons

total PM - 21.24744 tons (which is PM-CON - 10.06159 tons plus PM-FIL - 11.18585 tons)

Please double check the data that was submitted to SLEIS and make corrections as necessary.

Please review the attached revised draft/proposed permit and fact sheet and answer the questions and reply by Wednesday October 18, 2023.

Sincerely,

Dan Roberts

WV Department of Environmental Protection

Division of Air Quality

Title V Permitting Section

304-926-0499 ext. 41902

[Daniel.p.roberts@wv.gov](mailto:daniel.p.roberts@wv.gov)

On Fri, Oct 6, 2023 at 7:12 PM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

Mr. Khetani,

Good afternoon, The DAQ has been reviewing your renewal application and a draft/proposed permit and fact sheet are attached for your review. There have been no change in the equipment or operations at the facility since the 2018 renewal permit was issued, but several permit conditions were updated due the boilerplate changes, a change in the language in a regulation and two minor typographical errors, These updates are detailed in the Determinations and Justifications section of the draft/proposed fact sheet. The draft/proposed permit still contains the updates in order to be easier to review... deletions are noted in red with strikeout and additions are in blue and underlined.

The only question I have at this time is regarding the facility's PTE listed in the draft/proposed fact sheet in the Plantwide Emissions Summary Table. Please refer to the following summary table I have prepared for comparison. All emission limits listed are in TPY (tons per year).

	Fact Sheets			Renewal Applications
	2018	2013	2008	Item 23. Facility-Wide Emissions Summary
	<u>2018</u>	<u>2013</u>	<u>2008</u>	<u>2023 / 2018 / 2013</u>
CO	182.6	177.23	173.35	267.9
NOx	636.9	630.55	625.93	314.6
PM2.5	1093.9	1092.56	-----	-----
PM10	1093.9	1092.56	1085	130.9
PM	1278.4	1277	1277	130.9
SO2	8.92	4.18	4.18	8.92
VOC	53.9	53.5	53.5	51.0
Ni	190.8	190.78	190.78	27.2
Cr	56.0	56.01	56.0	7.6
HCl	20.0	20	20.0	3.9
Hexane	5.8	5.8	-----	5.8

In my research, I have not found an explanation as to why the PTE listed in the renewal applications from 2023, 2018 and 2013 remained the same and were not used in the approved fact sheets from 2018, 2013 and 2008. But it seems that the PTE listed in the fact sheets are corrected and reflect changes made over the years. Therefore, it appears that the PTE from the 2018 fact sheet should still be valid since there have been no changes in equipment or operations at the facility since the current permit and fact sheet were approved in 2018.

Please review the attached draft/proposed permit and fact sheet and offer any comments. Also, please comment on the PTE discussion above.

Sincerely,

Dan Roberts

WV Department of Environmental Protection

Division of Air Quality

Title V Permitting Section

304-926-0499 ext. 41902

Daniel.p.roberts@wv.gov

2 attachments



DPFactSheet R30-01100007-2023 10-13-23.doc

115K



DPPermit R30-01100007-2023 10-13-23.docx

374K

West Virginia Department of Environmental Protection

*Harold D. Ward
Cabinet Secretary*

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Huntington Alloys Corporation
Huntington WV Facility
R30-01100007-2023

Laura M. Crowder
Director, Division of Air Quality

*Issued: Draft/Proposed • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior
to expiration]*

Permit Number: **R30-01100007-2023**
Permittee: **Huntington Alloys Corporation**
Facility Name: **Huntington WV Facility**
Permittee Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 C Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Huntington, Cabell County, West Virginia
Facility Mailing Address:	3200 Riverside Drive, Huntington, WV 25705
Telephone Number:	(304) 526-5100
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of Nickel
SIC Codes:	3356
UTM Coordinates:	379.2 km Easting \$ 4252.30 km Northing \$ Zone 17

Permit Writer: Daniel P. Roberts

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Melt Shop					
B-1-P	B-1-S	Main Boiler	1952	80 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B		#5 Electric Arc Furnace	1971	35,000 lbs/hr	
MS-1A		Argon Oxygen Reactor	1971	35,000 lbs/hr	
MS-1E-P		Wire Feeder	2005	70,000 lbs/hr	
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr	Baghouse PM-6 & 25-C
PM-6-P		Southwest Grinder	1974		
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr	Baghouses PM-8A-C, PM-8B-C & PM-26-C
PM-8-P		Northwest Grinder	1966		
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C
PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None

PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-4-P	SM-4-S	United Mill	1967	7,000 lbs/hr	Mist Elim. SM-4-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr	None
BW-12-P		Wire Looping Section #2	1971		
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P, CD-2-P	CD-1-S, CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P, CD-4-P	CD-3-S, CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P, CD-6-P	CD-5-S, CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None

CD-7-P, CD-8-P	CD-7-S, CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P, CD-10-P	CD-9-S, CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P, CD-12-P	CD-11-S, CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P, CD-14-P	CD-13-S, CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5,708 lbs/hr	Baghouse/Cyclone CD- 40-C
Carpenter Shop					
CA-1-P, CA-2-P	CA-1-S, CA-2-S	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C, Baghouse TP-7A-3C
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None

TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-14-P	TP-14-S	Arc Slicer	2013	1,500 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-17-P	TP-17-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-18-P	TP-18-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0137	March 24, 1975
R13-1165	November 3, 1989
R13-1646A	March 5, 2015
R13-1767	October 17, 1994
R13-2163A	December 20, 2010
R13-2532I	February 25, 2016

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other ~~such~~ person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12 39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.3940]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§305.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and ~~45CSR38~~]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§305.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.11. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§7-10. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.12. The permittee shall burn natural gas meeting the FERC requirements exclusively for all furnaces.

[45CSR§30-12.7.]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment,

such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 2254(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13 - R13-2163 condition 4.4.1., R13-2532 condition 5.4.1.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. **Fugitives.** The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.]

- 3.4.5. **Fugitives.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic

format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV
25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. ~~Certified emissions statement~~ **Fees.** The permittee shall ~~submit a certified emissions statement and~~ pay fees on an annual basis in accordance with ~~the submittal requirements of the Division of Air Quality 45CSR§30-8.~~ **[45CSR§30-8.]**

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. Reserved.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or ~~telefax~~ email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

4.0 Indirect Fired Fuel Burning Units Requirements [emission unit IDs: B-1-P, B-4-P, SM-5-P, and CD-32-P]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. (B-1-P, B-4-P, CD-32-P, & SM-5-P)]
- 4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 9.54 pounds per hour for B-1-P and B-4-P.
[45CSR§2-4.1.b. (B-1-P & B-4-P)]
- 4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2. (B-1-P & B-4-P)]
- 4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (B-4-P)]
- 4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2. (B-1-P & B-4-P)]
- 4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 339.2 pounds per hour for B-1-P and B-4-P.
[45CSR§10-3.3.f. (B-1-P & B-4-P)]
- 4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

- 4.1.8. **40 CFR 63, Subpart DDDDD.** The natural gas-fired boilers B-1-P, B-4-P, SM-5-P, and CD-32-P shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" no later than the existing source compliance date of January 31, 2016.
- a. 1. You must meet each emission limit and work practice standard in Table 3 to 40 CFR 63 subpart DDDDD that applies to your boiler, for each boiler at your source.
 2. At all times, you must operate and maintain any affected source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 14.2.11. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 4.2.3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or [Tables](#) 11 through ~~13~~ [15](#) to this subpart, or the operating limits in Table 4 to 40 CFR 63 subpart DDDDD.
- [45CSR34; 40 CFR §§63.7495(b), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart**

DDDDD]

4.2. Monitoring Requirements

- 4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]
- 4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]
- 4.2.3. **How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?** You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you according to the methods specified in conditions a. through c. below
- a. For boilers B-1-P and B-4-P, that have a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in conditions i. through vi. below. You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler

over the 12 months prior to the tune-up. Each annual tune-up must be no more than 13 months after the previous tune-up.

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in conditions A. through C. below,
 - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - B. A description of any corrective actions taken as a part of the tune-up; and
 - C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- b. For boilers SM-5-P and CD-32-P, that have a heat input capacity of less than 10 million Btu per hour, you must conduct a biennial tune-up of the boiler as specified in conditions a.i. through vi. to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
- c. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR34; 40 CFR §§63.7540(a)(10), (11), (13), 63.7515(d)]

4.3. Testing Requirements

- 4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c. (B-1-P, B-4-P)]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. (B-1-P & B-4-P)]

- 4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
2. Excess opacity does not exceed 40%.

- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;
2. The date and time of duration (with starting and ending times) of the period of excess emissions;
3. An estimate of the mass of excess emissions discharged during the malfunction period;
4. The maximum opacity measured or observed during the malfunction;
5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (B-1-P & B-4-P)]

- 4.5.3. a. For units that are subject only to a requirement to conduct annual, biennial, or 5-year tune-ups according to conditions 4.2.3. and 14.2.11, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs 1. through 4. below, instead of a semi-annual compliance report.
1. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in condition 4.1.8. and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in conditions 4.1.8. and 14.2.11.
 2. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
 3. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
 4. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.
- b. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
1. If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs i. through v. below.
 - i. Company and Facility name and address.
 - ii. Process unit information, emissions limitations, and operating parameter limitations.
 - iii. Date of report and beginning and ending dates of the reporting period.
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to condition 4.2.3. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled or unscheduled unit shutdown.
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. You must submit all reports required by Table 9 of 40 CFR subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- [45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]**

4.6. Compliance Plan

4.6.1. None.

5.0 Direct Fired Furnaces Requirements [emission unit IDs: PM-10A-P, PM-10B-P, PM-11-P, PM-12A-P, PM-12B-P, PM-13-P, PM-14-P, PM-15-P, PM-16-P, PM-17A-P, PM-17B-P, PM-18-P, PM-19-P, PM-23-P, PM-28-P, PM-29-P, SM-6-P, SM-7-P, BW-1A-P, BW-1B-P, BW-2-P, VM-2-P, VM-5-P, MA-4-P, MA-5-P]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§§7-3.1 and 3.2 and 45CSR13 - R13-1646 Condition 4.1.4., R13-1767 Condition B.1., and R13-2163 Condition 4.1.6.]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38
Ingot Furnace F-5	PM-13-P	11.2
Ingot Furnace F-6	PM-14-P	9
Ingot Furnace F-7	PM-15-P	9

[45CSR§7-4.1. and 45CSR13 - R13-2163 Condition 4.1.6.]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.; 45CSR13 - R13-1646 Condition 4.1.7.]

5.1.4. Emissions from the tip up furnaces shall not exceed the following:

	NO _x		SO ₂		CO		PM/PM ₁₀ /PM _{2.5}		VOCs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
MA-4-P	1.93	8.46	0.01	0.05	0.48	2.11	0.07	0.31	0.04	0.18
MA-5-P	1.45	6.34	0.01	0.04	1.22	5.33	0.11	0.48	0.08	0.35
Total	3.38	14.80	0.02	0.09	1.70	7.44	0.18	0.79	0.12	0.53

For MA-4-P and MA-5-P, compliance with the PM limits demonstrates compliance with the PM emission limits from 45CSR§7-4.1.

[45CSR13 - R13-1646, Conditions 4.1.1. & 4.1.6. and 45CSR§7-4.1.]

- 5.1.5. Natural gas consumption by the furnaces shall not exceed the following:

Furnace	Natural gas usage (cubic feet per hour)
MA-4-P	13,800
MA-5-P	14,476

[45CSR13 - R13-1646, Condition 4.1.2.]

- 5.1.6. The furnaces shall not process bars/rods in excess of the following:

Furnace	Pounds of rods/bars per hour
MA-4-P	20,000
MA-5-P	30,000

[45CSR13 - R13-1646, Condition 4.1.3.]

- 5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0 x 106 Btu/hr.

[45CSR13 - R13-1767, Condition A.1. (PM-23-P)]

- 5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

Particulates	0.075 lb/hr
Sulfur Dioxide	0.015 lb/hr
Nitrogen Oxide	2.5 lb/hr
Carbon Monoxide	0.875 lb/hr
Total Hydrocarbons	0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1767, Condition A.2. and 45CSR§7-4.1. (PM-23-P)]

- 5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.

[45CSR13 - R13-1767, Condition A.3. (PM-23-P)]

- 5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.

[45CSR13 - R13-1767, Condition A.4. (PM-23-P)]

- 5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission rate for Two Furnaces	
	lb/hr	tons/yr ⁽²⁾	lb/hr	tons/yr
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: ⁽¹⁾ Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

⁽²⁾ Annual emissions are based on an operating schedule of 8,760 hours per year.

Compliance with the PM limits demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-2163, Conditions 4.1.1. and 4.1.6. and 45CSR§7-4.1. (PM-28-P and PM-29-P)]

- 5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.

[45CSR13 - R13-2163, Condition 4.1.2. (PM-28-P and PM-29-P)]

- 5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NOx burners for each furnace not to exceed 1.25 MM Btu/hr heat input).

[45CSR13 - R13-2163, Condition 4.1.3. (PM-28-P and PM-29-P)]

- 5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).

[45CSR13 - R13-2163, Condition 4.1.4. (PM-28-P and PM-29-P)]

- 5.1.15. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-1646, Condition 4.1.5. (MA-4-P, MA-5-P)]

5.2. Monitoring Requirements

- 5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

- 5.2.2. In order to determine compliance with the opacity requirements of condition 5.1.1. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for Tip-up furnace MA-5-P.
- a. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.
 - b. Visible emissions checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.
 - c. If visible emissions are present at a source(s) the permittee shall take corrective action as soon as practicable, but within seventy-two (72) hours of the emission check. Once corrective action has been taken another observation shall be made to confirm that no visible emissions are present.

[45CSR13 - R13-1646, Condition 4.2.1.]

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

- 5.4.1. In order to determine compliance with condition 5.1.5. of this permit, the permittee shall maintain records showing the amount of natural gas fired monthly in furnaces MA-4-P and MA-5-P.
[45CSR13 - R13-1646, Condition 4.3.4.]
- 5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NO_x emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767, Condition B.2. and 45CSR§30-5.1.c. (PM-23-P)]
- 5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification

of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described. **[45CSR13-R13-2163, Condition 4.4.4. (PM-28-P and PM-29-P)]**

5.4.4. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-1646, Condition 4.3.1. (MA-5-P)]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Hot Working Operations Requirements [emission unit IDs: MS-1A, MS-1D, MS-1B, MS-1E-P, MS-2, PM-1&2P, PM-3-P, PM-20-P, BW-3-P, BW-12-P, BW-10-P, BW-11-P]

6.1. Limitations and Standards

- 6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13
Wire Feeder	MS-1E-P	
#4 Electric Arc Furnace	MS-1D	11
#5 Electric Arc Furnace	MS-1B	11
Powder Torch	MS-2	5
#1 Primary Rolling Mill	PM-1&2P	24
Plasma Torch	PM-3-P	3
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1
Scholle Saw	BW-10-P	7.1
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

- 6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

- 6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1. (MS-1A, MS-1B, MS-1D)]

- 6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 lbm/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1165, Specific Requirement (A) and 45CSR§7-4.1. (PM-20-P)]

- 6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.

[45CSR13 - R13-1165, Specific Requirement (B)]

6.2. Monitoring Requirements

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged into the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§10-8.2.c., 45CSR§30-5.1.c.]

6.2.3. The pressure drop through the baghouses shall be measured at the baghouse inlet and exhaust on a continuous basis. The pressure gauge, with a minimum accuracy of 0.5%, shall be calibrated quarterly and the pressure readings shall be checked daily for proper operation. The pressure drop across the baghouse shall be averaged daily. If the average falls below 2 inches of water or exceeds 8 inches of water, an excursion has occurred, and corrective action shall be taken as follows:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.2.4. Qualified personnel shall perform a weekly inspection of the baghouses in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

- 6.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 6.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 6.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 6.2.8. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 6.2.9. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 6.2.8.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 6.5.1.c for the reporting required when a QIP is implemented.
[40 CFR § 64.8; 45CSR§30-5.1.c.]

6.3. Testing Requirements

- 6.3.1. None.

6.4. Recordkeeping Requirements

- 6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]
- 6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.
[45CSR§10-8.2.c., 45CSR§30-5.1.c.]
- 6.4.3. The permittee shall record baghouse pressure drop readings taken in accordance with Section 6.2.3. of this permit on a continuous basis.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(b)(4) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.4. The permittee shall maintain records to document weekly baghouse inspections and any required maintenance.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.5. The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR § 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c., 40 C.F.R. § 64.9(b)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.5. Reporting Requirements

- 6.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.6. Compliance Plan

- 6.6.1. None.

7.0 Cold Working Operations Requirements [emission unit IDs: PM-4-P, PM-5-P, PM-25-P, PM-6-P, PM-7-P, PM-26-P, PM-8-P, SM-2-P, SM-3-P, SM-4-P, SM-10-P, CS-1-P, CS-2-P, CS-3-P, CS-4-P, CD-17-P, CD-23-P, CD-31-P, CD-39-P, CD-40-P]

7.1. Limitations and Standards

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99
Southeast Grinder	PM-5-P	2.99
Southcentral Grinder	PM-25-P	2.99
Southwest Grinder	PM-6-P	2.99
Northeast Grinder	PM-7-P	2.99
Northcentral Grinder	PM-26-P	2.99
Northwest Grinder	PM-8-P	2.99
CAP Shot Blaster	SM-2-P	9.15
MKW Rolling Mill	SM-3-P	6.68
United Rolling Mill	SM-4-P	6.04
Schluter Grinder	CS-1-P	0.41
Norton Grinder	CS-2-P	0.85
#1 Centro-M Grinder	CS-3-P	0.77
#2 Centro-M Grinder	CS-4-P	0.78
East Cutters (3 Saws)	CD-17-P	0.43
West Cutters (3 Saws)	CD-23-P	0.57
Grind Building Saw	CD-31-P	0.72
Rod Cell Saw	CD-39-P	1.20
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163, Condition 4.1.5]

7.2. Monitoring Requirements

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.2. The water level in the scrubber system shall be measured continuously and the fan operation shall be monitored continuously. The water level switch shall be tested quarterly and the fan operation monitor shall be checked daily. The water level shall be maintained via level switch and if the water is below the acceptable level, an excursion has occurred, and an alarm shall sound to notify the operator. In the event of an excursion:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Wet Scrubber SM-2-C)]

7.2.3. Qualified personnel shall perform a daily check of the scrubber system, and a monthly inspection of the scrubber system in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.1. (Baghouse/Cyclone CD-40-C)]

- 7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.2. (Baghouse/Cyclone CD-40-C)]
- 7.2.6. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 7.2.7. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 7.2.8. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 7.2.9. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 7.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 7.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 7.5.1.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

7.3. Testing Requirements

- 7.3.1. None.

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records to document the daily checks, the monthly scrubber system inspections and any required maintenance.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

- 7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163, Condition 4.4.2.]

- 7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163, Condition 4.4.3.]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.4.4.]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163, Condition 4.4.5.]

7.5. Reporting Requirements

7.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Wet Scrubber SM-2-C)]

7.6. Compliance Plan

7.6.1. None.

8.0 Woodworking Operations Requirements [emission unit IDs: CA-1-P, CA-2-P, SC-1-P, SC-2-P]

8.1 Limitations and Standards

- 8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3
Woodcutting Operations	CA-2-P	3
Wood Saws	SC-1-P	1
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

- 8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

8.2 Monitoring Requirements

- 8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

8.3 Testing Requirements

- 8.3.1. None.

8.4 Recordkeeping Requirements

- 8.4.1. None.

8.5 Reporting Requirements

- 8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

9.0 Process Tanks Requirements [Pickling Tanks – emission unit IDs: SM-1-P, CD-1-P, CD-2-P, CD-3-P, CD-4-P, CD-5-P, CD-6-P, CD-7-P, CD-8-P, CD-9-P, CD-10-P, CD-11-P, CD-12-P, CD-13-P, CD-14-P, CD-38-P]

9.1. Limitations and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 (Pickling Tanks)]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2. (Pickling Tanks)]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1. (Pickling Tanks)]

9.2. Monitoring Requirements

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

- 9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. None.

9.5. Reporting Requirements

- 9.5.1. None.

9.6. Compliance Plan

- 9.6.1. None.

10.0 Lime Storage Requirements [emission unit ID: MS-9-P]

10.1. Limitations and Standards

- 10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]
- 10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]
- 10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

10.2. Monitoring Requirements

- 10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

- 10.3.1. None.

10.4. Recordkeeping Requirements

- 10.4.1. The permittee shall maintain the design information on the baghouse at the facility.
[45CSR§30-5.1.c.]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.

11.0 Degreaser Requirements

11.1 Limitations and Standards

- 11.1.1. The owner or operator of a cold cleaning facility shall equip the cleaner with a cover that is easily operated with one hand, if the solvent is agitated; provide a permanent, legible, conspicuous label, summarizing the operating requirements; store waste solvent in covered containers; close the cover whenever parts are not being handled in the cleaner; drain the cleaned parts until dripping ceases; and degrease only materials that are neither porous nor absorbent.

[45CSR§§21-30.3.a.1.B., 30.3.a.4, 30.3.a.5., 30.3.a.6., 30.3.a.7., 30.3.a.9. (Cold Solvent Degreasers) State-Enforceable only.]

11.2 Monitoring Requirements

- 11.2.1. None.

11.3 Testing Requirements

- 11.3.1. None.

11.4 Recordkeeping Requirements

- 11.4.1. None.

11.5 Reporting Requirements

- 11.5.1. The owner or operator of any facility containing sources subject to section 30 of 45CSR21 shall comply with the requirements of 45CSR§21-5.2. regarding reports of excess emissions.

[45CSR§21-30.6.b. State-Enforceable only.]

11.6 Compliance Plan

- 11.6.1. None.

12.0 Chrome Plating Requirements [emission unit ID: CD-36-P]

12.1. Limitations and Standards

- 12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]
- 12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]
- 12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]
- 12.1.4. *Operation and maintenance practices.* All owners or operators subject to the standards of 40 CFR 63 subpart N are subject to these work practice standards.
1.
 - i. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.
 - ii. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - iii. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 2.
 - i. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
 - ii. Based on the results of a determination made under paragraph 2.i. above, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph 3. below for that source. Revisions may be required if the Administrator finds that the plan:
 - A. Does not address a malfunction that has occurred;
 - B. Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - C. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
 3. *Operation and maintenance plan.*
 - i. The owner or operator of an affected source subject to the work practices of condition 12.1.4. shall prepare an operation and maintenance plan to be implemented no later than the compliance date.

The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in A. through E. below.

- A. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
- B. For sources using an add-on control device or monitoring equipment to comply with 40 CFR 63, subpart N, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in the following Table:

Control Technique	Operation and maintenance practices	Frequency
PBS/CMP system	Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1/quarter
	Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	1/quarter
	Visually inspect ductwork from tank to the control device to ensure there are no leaks	1/quarter
	Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	Per manufacturer

- C. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - D. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
 - E. The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63, subpart N.
- ii. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
 - iii. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph 3.i. above, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.
 - iv. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep

previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

- v. To satisfy the requirements of paragraph 3. of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

[45CSR34 and 40 C.F.R. § 63.342(f)]

- 12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.

[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

12.2. Monitoring Requirements

- 12.2.1. *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of 40 CFR 63 Subpart N shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

- a. *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of condition 12.1.3. shall comply with the monitoring requirements for composite mesh-pad systems as follows:

- i. During a performance test, the owner or operator of an affected source complying with the emission limitations in condition 12.1.3. through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1., and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in condition 12.3.1.c. An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.
- ii. The owner or operator of an affected source shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.
- iii. The owner or operator of an affected source complying with the emission limitations through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs a.i. or ii. above. To establish a new site-specific operating

parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs a.iii.A. through D. below.

- A. Determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1.b.;
 - B. Establish the site-specific operating parameter value using the procedures in condition 12.3.1.c.;
 - C. Satisfy the recordkeeping requirements in condition 12.4.1.6. through 12.4.1.8; and
 - D. Satisfy the reporting requirements in §§63.347(d) and (f).
- iv. The requirement to operate a composite mesh-pad system within the range of pressure drop values established under conditions 12.2.1.a.i. through iii. does not apply during automatic washdown cycles of the composite mesh-pad system.

[45CSR34 and 40 CFR §§ 63.343(c), (c)(1), and (c)(3)]

12.3. Testing Requirements

- 12.3.1. a. *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures below. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 1. through 9. below. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
1. A brief process description;
 2. Sampling location description(s);
 3. A description of sampling and analytical procedures and any modifications to standard procedures;
 4. Test results;
 5. Quality assurance procedures and results;
 6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
 7. Raw data sheets for field sampling and field and laboratory analyses;
 8. Documentation of calculations; and
 9. Any other information required by the test method.
- b. *Test methods.* Each owner or operator subject to the provisions of 40 CFR 63 subpart N shall use the test method identified below to demonstrate compliance with the standards in condition 12.1.3.

Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations,” appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths must demonstrate compliance with the emission limits of §63.342 by measuring the total chromium.

- c. The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with condition 12.2.1.a. may establish the pressure drop in accordance with the following guidelines:
 - i. Pressure taps shall be installed at any of the following locations:
 - A. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
 - B. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
 - C. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
 - ii. Pressure taps shall be sited at locations that are:
 - A. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
 - B. Situated such that no air infiltration at measurement site will occur that could bias the measurement.
 - iii. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
 - iv. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
 - v. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.
 - vi. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.
- [45CSR34 and 40 CFR §63.344(a), (c)(1), (d)(5)]**

12.4. Recordkeeping Requirements

- 12.4.1. The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.
 - 1. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
 - 2. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;
 - 3. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air

pollution control, and monitoring equipment;

4. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
5. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);
6. Test reports documenting results of all performance tests;
7. All measurements as may be necessary to determine the conditions of performance tests;
8. Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
10. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
11. The total process operating time of the affected source during the reporting period;
12. All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.

[45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.346]

12.5. Reporting Requirements

- 12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.

[45CSR34 and 40 C.F.R. § 63.347(a)]

- 12.5.2. *Ongoing compliance status reports for major sources.* The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.

[45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.347(g)]

- 12.5.3. *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).

[45CSR34 and 40 C.F.R. § 63.347(g)(3)]

- 12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each

monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

12.6. Compliance Plan

12.6.1. None.

13.0 Thistle Processing, LLC Requirements [emission unit IDs: TP-1P, TP-3P, TP-4P, TP-5P, TP-6P, TP-13-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

13.1. Limitations and Standards

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59
Plasma Cutter (TP-3P)	0.5	2.19
Arc Cutter 1 (TP-4P)	0.05	0.21
Arc Cutter 2 (TP-5P)	0.05	0.21
Arc Cutter 3 (TP-13-P)	0.03	0.13
Arc Cutter 4 (TP-15-P)	0.03	0.13
Arc Cutter 5 (TP-16-P)	0.03	0.13
Arc Cutter 6 (TP-17-P)	0.03	0.13
Arc Cutter 7 (TP-18-P)	0.03	0.13
Cabinet Blaster (TP-6P)	0.01	0.03
Viking Belt Blaster (TP-19-P)	0.05	0.19
Total	0.93	4.07

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1.

[45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day
Viking Belt Blaster	Pounds of Shot Used	600 pounds per day
Plasma Cutter	Pounds Cut	18,000 pounds per day
Cabinet Blasting	Pounds of Shot Used	200 pounds per day
Arc Cutting	Rods Used	3,360 per day ⁽¹⁾

⁽¹⁾ Note: This represents the amount to be used for all seven (7) arc cutters in total.

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.3. Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Condition 4.1.3.]

13.1.4. Particulate Matter emissions from the Tumble Blaster and Viking Belt Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster and Viking Belt Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Conditions 4.1.4. and 4.1.5]

13.1.5. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open

air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45CSR§7-3.1.]

- 13.1.6. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8. and 45CSR§7-5.1.]

- 13.1.7. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR13 - Permit R13-2532, Condition 4.1.9. and 45CSR§7-5.2.]

- 13.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 4.1.10. and 45CSR§13-5.11.]

13.2. Testing Requirements

- 13.2.1. None.

13.3. Monitoring and Recordkeeping Requirements

- 13.3.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1.]

- 13.3.2. For Baghouse TP-10C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

- 13.3.3. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 4.3.2.]

- 13.3.4. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 4.3.3.]

- 13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.
- b. The pounds of material cut by the plasma cutter.
- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4.]

13.4. Reporting Requirements

- 13.4.1. None.

13.5. Compliance Plan

- 13.5.1. None.

14.0 Recycled Scrap Metal Requirements [emission unit IDs: TP-2-P, TP-7A-P, TP-8A-P, TP-7B-P, TP-8B-P, TP-9-P, TP-10-P, TP-11-P, TP-12-P, TP-13-P, TP-14-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

14.1. Limitations and Standards

14.1.1. **Scrap Metal Nickel and Chromium Content.** The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.2. **Emission Point (TP-2-S) - Plasma Cutter PM and HAP Emissions.** The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Particulate Matter (PM)	0.5	1.75
Hazardous Air Pollutants (HAP) ⁽²⁾	0.43	1.49

⁽¹⁾ Based on operating the Plasma Cutter 8,760 hr/yr and an emission factor of maximum mass loss of 0.5 lb/hr and average mass loss of 0.4 lb/hr.

⁽²⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.2.]

14.1.3. **Control Equipment Guaranteed Collection Efficiencies.** The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 1 is in operation.
TP-7A-2C	Thermal Oxidizer		VOC	99	
TP-7A-3C	Baghouse		PM	99	
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal Oxidizer		VOC	99	
TP-8A-3C	Baghouse		PM	99	
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532, Condition 5.1.3.]

- 14.1.4. **Scrap Metal Processing Rates.** The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	Ton/yr	
TP-2-P	Plasma Cutter	5,000	21,900	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates.
TP-9-P	Scrap Metal Crusher	7,040 ⁽¹⁾	8,975 ⁽¹⁾	
TP-10-P	Shot/ Tumble Blaster	15,000	3,000	
TP-7A-P	Kiln 1	8,000	35,040	
TP-8A-P	Kiln 2	8,000	35,040	
TP-13-P	Arc Cutter	15,000	---	
TP-14-P	Arc Slicer	1,500	---	
TP-15-P	Arc Cutter	15,000	---	
TP-16-P	Arc Cutter	15,000	---	
TP-17-P	Arc Cutter	15,000	---	
TP-18-P	Arc Cutter	15,000	---	

⁽¹⁾ Crusher hourly and annual scrap metal processing rates cannot be increased for five (5) years from the date of issuance for R13-2532D. These rates were set here such that the 45CSR13 Modification Permitting Threshold limits of 2 lb/hr and 5 ton/yr for HAP emissions were not crossed.

[45CSR13 - Permit R13-2532, Condition 5.1.4.]

- 14.1.5. **Emission Point (TP-9-S) - Crusher PM Controls.** The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

- 14.1.6. **Emission Point (TP-9-S) - Crusher PM Emissions.** The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	1.75	2.20
⁽³⁾ Hazardous Air Pollutants (HAP)	1.49	1.90

⁽¹⁾ After controls [Electrostatic Precipitator (ESP) (Control Device ID No. TP-9-C)]. Based on an ESP control/removal efficiency of 88.3%.

⁽²⁾ Based on processing 7,040 lb/hr and 8,975 ton/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.6.]

- 14.1.7. **Maximum DHI Rates - NG Burner Equipment.** The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MMBtu/hr)	Comments
TP-11-P	TP-11-S	Wash Water Burner	0.83	Provides hot water to wash dirt, oil, & grease from scrap metal.
TP-12-P	TP-12-S	Rinse Water Burner	0.44	Provides hot water to rinse the scrap metal once it is washed.
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2	Provides indirect heat to Kiln 1 (TP-7A-P).
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2	Provides Indirect heat to Kiln 2 (TP-8A-P).
---	TP-7A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 1 (TP-7A-P). Vents into Kiln 1's exhaust stream/emission point.
---	TP-8A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 2 (TP-8A-P). Vents into Kiln 1's exhaust stream/emission point.

[45CSR13 - Permit R13-2532, Condition 5.1.7.]

- 14.1.8. **Emission Point (TP-11-S) - Wash Water Burner – NG Combustion Emissions.** Emission point (TP-11-S) associated with the Wash Water Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.3

⁽¹⁾ Based on operating the Wash Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.8.]

- 14.1.9. **Emission Point (TP-12-S) - Rinse Water Burner – NG Combustion Emissions.** Emission point (TP-12-S) associated with the Rinse Water Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

⁽¹⁾ Based on operating the Rinse Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.9.]

- 14.1.10. **Emission Point TP-10-P - Shot Blast PM Controls.** The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532, Condition 5.1.10.]

- 14.1.11. **Emission Point TP-10-P - Shot Blast PM Emissions.** Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Baghouse (Control Device TP-10-9C)]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 15,000 lb/hr and 6.00 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.11.]

- 14.1.12. **Emission Points TP-7B-P and TP-8B-P – Kiln Burners – NG Combustion Emissions.** Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.2	0.86
Carbon Monoxide (CO)	0.17	0.72

⁽¹⁾ Based on operating each Rotary Kiln Burner 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.12.]

- 14.1.13. **Emission Points TP-7A-P – Kiln 1 Exhaust Controls.** The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A-2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.13.]

- 14.1.14. **Emission Points TP-8A-P – Kiln 2 Exhaust Controls.** The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.14.]

- 14.1.15. **Emission Points TP-7A-P and TP-8A-P – Kiln Exhaust Emissions.** Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr ⁽¹⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.8	2.46
Nitrogen Oxide (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic Compounds	0.8	3.55

⁽¹⁾ After controls [one (1) Cyclone, one (1) Thermal Oxidizer, and one Baghouse per each kiln].

⁽²⁾ Based on operating each Rotary Burn-off Kiln 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.15.]

- 14.1.16. **Fuel Burning Equipment Opacity Limit – NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2.**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.16.]

- 14.1.17. **Fuel Burning Unit Emission Rate Limitation – NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.** No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type ‘b’ fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.’s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§§2-4.1. and 4.1.b.; 45CSR13 - Permit R13-2532, Condition 5.1.18]

- 14.1.18. **Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

- 14.1.19. **Process PM Emission Weight Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

- 14.1.20. **Sulfur Dioxide (SO₂) In-stack Concentration Limitation – Kiln 1 and Kiln 2 Exhausts.** No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.22.]

- 14.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 14.1.3. and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 5.1.23.]

- 14.1.22. **Emission Point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) - Arc Cutter PM & HAP Emissions.** The emission point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) associated with the Arc Cutter (TP-13-P, TP-15-P, TP-16-P, TP-17-P, and TP-18-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

- 14.1.23. **Emission Point (TP-14-S) - Arc Slicer PM & HAP Emissions.** The emission point (TP-14-S) associated with the Arc Slicer (TP-14-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.02	0.07
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 0.404 lb/hr and an emission factor(s) for electrode type E6011.

⁽²⁾ Based on operating 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.27.]

- 14.1.24. **Emission Point (TP-19-S) - Viking Belt Blaster PM & HAP Emissions.** The emission point (TP-19-S) associated with the Viking Belt Blaster (TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.05	0.19
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Internal Baghouse]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 600 lb/hr and 5.26 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.28.]

- 14.1.25. **40 CFR 63 Subpart DDDDD.** The natural-gas fired equipment, Wash Water, Rinse Water, Kiln 1, Kiln 2, shall comply with all applicable requirements in accordance with condition 4.1.8.

[45CSR34; 40 CFR §§63.7495(a), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

14.2. Monitoring Requirements

- 14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shut down when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

- 14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532, Condition 5.2.1.]
- 14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532, Condition 5.2.2.]
- 14.2.4. **Commencement of operation.** The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.
[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]
- 14.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 14.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 14.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 14.2.8. **Excursions.** An excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation.
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 14.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 14.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

- 14.2.11. You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you for the equipment listed in condition 14.1.25. according to the methods specified in condition 4.2.3.a.i. through vi. You must conduct a tune-up of the boiler or process heater every 5 years. You may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new source, the first 5-year tune-up must be no later than 61 months after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

[45CSR34; 40 CFR §§63.7540(a)(10), (12), 63.7515(d)]

14.3. Testing Requirements

- 14.3.1. **Opacity Testing.** To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4. Recordkeeping Requirements

14.4.1. Records, Operation and Compliance.

- a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.
- b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.
- c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.
- d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.
- e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.
- f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.
- g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.
- h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

- 14.4.2. **Equipment Maintenance Records.** The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.3. **Certification of Information.** Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 14.1.3., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 14.1.3., the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. **Opacity Records.** The permittee shall maintain records of the monitoring data required in Section 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.9. **General recordkeeping requirements for CAM:**

- a. The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 any

activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[45CSR§30-5.1.c. and 40 C.F.R. §64.9 (b)]

14.5. Reporting Requirements

- 14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

- 14.5.2. **General reporting requirements for CAM.** A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.9(a)(2)]

- 14.5.3. You must submit reports in accordance with condition 4.5.3.

[45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]

14.6. Compliance Plan

- 14.6.1. None.

Appendix A - 45CSR2 and 45CSR10 Monitoring Plans

Regulation 2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type 'b' sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1	Main Boiler	80.0	$(80.0)(0.09) = 7.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3 \text{ \#/hr}$
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 2 – Applicable Requirements:

1. West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
2. Main Boiler (B-1) and VIM Boiler (B-4) have inputs of 80.0 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Start-up and shut-down records are kept for both of these sources.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.

Regulation 10 – To Prevent and Control Air Pollution from the emission of Sulfur Oxides:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type ‘b’ sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1	Main Boiler	80.0	$(80.0)(0.09) = 7.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3 \text{ \#/hr}$
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 10 – Applicable Requirements:

1. West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources are exempt from the provisions of Regulation 10 and 10A due to a MMBTU/Hr burner rating of less than 10MMBTU/Hr. These two sources burn natural gas only and do not burn a process gas that contains hydrogen sulfide.
2. Main Boiler (B-1) and VIM Boiler (B-4) have inputs of 80.0 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources are exempt from Regulation 10 and 10A due to combustion of natural gas only and do not burn a process gas that contains hydrogen sulfide. Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Exempt from Regulation 10, section 8 testing, monitoring, recordkeeping and reporting requirements due to the combustion of natural gas only in both of these sources.

Manufacturing Process Sources - Regulation 10 Applicability

**Direct Combustion Sources – Direct Natural Gas Fired Processes
 Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates**

Huntington Alloys – Products of Natural Gas Combustion				Tons per Year - Potential to Emit – SO ₂				
Description	Emission Point #	Capacity GAS MMBTU/hr	SO ₂ **	PTE	PTE	PTE	PTE	
			Allowable lbs/hour	Sulfur Max PPM Nat. Gas	SO ₂ Ton/Year	SO ₂ Pound/Yr	SO ₂ Pound/Hr	
F-11 Reheat Fce	PM-9A	26.7	82.8	<10.0 PPM	0.053	107	0.012	
F-12- Reheat Fce	PM-9B	26.7	82.8	<10.0 PPM	0.053	107	0.012	
F-21 Forge Fce	PM-10A	8.9	27.6	<10.0 PPM	0.018	36	0.004	
F-22 Forge Fce	PM-10B	8.9	27.6	<10.0 PPM	0.018	36	0.004	
F-3 Forge Fce	PM-11	112.0	347.2	<10.0 PPM	0.224	448	0.051	
F-41 Ingot Fce	PM-12A	14.4	44.6	<10.0 PPM	0.029	58	0.007	
F-42 Ingot Fce	PM-12B	14.4	44.6	<10.0 PPM	0.029	58	0.007	
F-5 Ingot Fce	PM-13	60.0	186.0	<10.0 PPM	0.120	240	0.027	
F-6 Ingot Fce	PM-14	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-7 Ingot Fce	PM-15	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-8 Ingot Fce	PM-16	52.8	163.7	<10.0 PPM	0.106	211	0.024	
F-91 Ingot Fce	PM-17A	14.3	44.3	<10.0 PPM	0.029	57	0.007	
F-92 Ingot Fce	PM-17B	14.3	44.3	<10.0 PPM	0.029	57	0.007	
#1 CB Fce	PM-18	84.8	262.9	<10.0 PPM	0.170	339	0.039	
#2 CB Fce	PM-19	20.8	64.5	<10.0 PPM	0.042	83	0.010	
E Steckel Reheat	PM-21	19.3	59.8	<10.0 PPM	0.039	77	0.009	
W Steckel Reheat	PM-22	19.3	59.8	<10.0 PPM	0.039	77	0.009	
F-101 Forge Fce	PM-28	13.6	42.2	<10.0 PPM	0.027	54	0.006	
F-102 Forge Fce	PM-29	13.6	42.2	<10.0 PPM	0.027	54	0.006	
Tank #59 Dryer	CD-15	1.0	3.1	<10.0 PPM	0.002	4	0.000	
Drying Tank #2	CD-18	1.0	3.1	<10.0 PPM	0.002	4	0.000	
Drying Tank #3	CD-19	2.0	6.2	<10.0 PPM	0.004	8	0.001	
#2 CAF Fce	CD-20	7.0	21.7	<10.0 PPM	0.014	28	0.003	
#3 CAF Fce	CD-21	7.5	23.3	<10.0 PPM	0.015	30	0.003	
#4 CAF Fce	CD-22	6.1	18.9	<10.0 PPM	0.012	24	0.003	
#10A Fce	CD-24 (NO)	3.0	9.3	<10.0 PPM	0.006	12	0.001	
Squeeze Point	CD-25	0.5	1.6	<10.0 PPM	0.001	2	0.000	
CAP Fces	SM-9	49.5	153.5	<10.0 PPM	0.099	198	0.023	
BAL Drier	SM-11	1.0	3.1	<10.0 PPM	0.002	4	0.000	
23" Mill Fce #1	BW-1A	40.0	124.0	<10.0 PPM	0.080	160	0.018	
23" Mill Fce #2	BW-1B	40.0	124.0	<10.0 PPM	0.080	160	0.018	
Walking Beam Fce	BW-2	30.0	93.0	<10.0 PPM	0.060	120	0.014	
MS E. Ladle Rht	MS-4A	2.0	6.2	<10.0 PPM	0.004	8	0.001	
MS W. Ladle Rht	MS-4B	1.0	3.1	<10.0 PPM	0.002	4	0.000	
New W. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002	
New E. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002	
AOD Vessel Rht	MS-7	10.0	30.8	<10.0 PPM	0.020	40	0.005	
Rotary Hearth	AR-1 (NO)	4.0	12.4	<10.0 PPM	0.008	16	0.002	
Tip-Up Fce	PM-24	14.0	43.4	<10.0 PPM	0.028	56	0.006	
Stress Relief Fce	VM-1	4.5	14.0	<10.0 PPM	0.009	18	0.002	
Mold Preheat	VM-2	6.0	18.6	<10.0 PPM	0.012	24	0.003	
VIM Drying Oven	VM-3	1.4	4.3	<10.0 PPM	0.003	6	0.001	
VIM Ladle Preheat	VM-4	1.8	5.6	<10.0 PPM	0.004	7	0.001	
VIM Fce Shell Htr	VM-	1.5	4.7	<10.0 PPM	0.003	6	0.001	
Rod Heat Treat	MA-4	13.8	42.8	<10.0 PPM	0.028	55	0.006	
Plate Anneal Fce	PM-23	25.0	77.5	<10.0 PPM	0.050	100	0.011	

Direct
Fired
Sources

Indirect Fired Sources	Main Boiler	B-1	80.0	248.0	<10.0 PPM	0.160	320	0.037
	VIM Boiler	B-4	26.0	80.6	<10.0 PPM	0.052	104	0.012
	WP Salt Bath	CD-32	7.2	22.3	<10.0 PPM	0.014	29	0.003
	CAP Salt Bath	SM-5,6,7	2.7	8.4	<10.0 PPM	0.005	11	0.001

** = MMBTU/HR X 3.1 per Regulation 10

PTE – Based on 8,760 hours of operation

(NO) = Not Operational

Manufacturing Process Sources - Regulation 10 Applicability

**Huntington Plant Melting Department – Electric Arc Furnaces and Argon Oxygen Decarburization Vessel
 Applicability Determination and Compliance Monitoring Method**

- These sources are covered under the Title V permit application for this facility.
- Due to the fact that these sources have the potential to emit Sulfur dioxide in amounts that exceed 500 pounds per year, a monitoring plan, as required by regulation 10 and 10A, has been instituted for these sources. The monitoring plan will identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured by the Huntington Plant analytical laboratory in total percent sulfur by weight. This number will then be directly converted to an estimated maximum monthly concentration of sulfur dioxide emitted from the dust collector. The chart below details the format of the monthly report.

**Huntington Alloys – Huntington Plant
 Regulation 10 – Sulfur Dioxide Monitoring
 Electric Arc Furnace – AOD Melting Department**

Month/Year: _____

Month	Highest Monthly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum monthly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
January			2,000
February			2,000
March			2,000
April			2,000
May			2,000
June			2,000
July			2,000
August			2,000
September			2,000
October			2,000
November			2,000
December			2,000

- Notes: (1) This value represents the highest melt/heat sulfur content observed during this reporting month from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
- (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
- (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant Cold Drawing Department – West & East Pickle House – Sulfuric Acid Pickling Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- Stack testing of Sulfuric Acid pickling processes has shown that they do not produce sulfur dioxide air emissions as a result of operations. Sulfuric Acid Pickling produces sulfuric acid (H_2SO_4) mist emissions that are not covered by Regulation 10. These sources are in compliance with the WV Office of Air Quality limitations for sulfuric acid mist emissions under Regulation 7.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant - All other production processes not previously listed Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- No other sources, other than those previously listed, have the capability of producing Sulfur Dioxide air emissions at the Huntington Facility.

Regulation 10 – Sulfur Dioxide Monitoring Electric Arc Furnace – AOD Melting Department

Quarter:	Year:
-----------------	--------------

Quarter	Highest Quarterly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum quarterly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
01-01-01 to 03-31-01			2,000
04-01-01 to 06-30-01			2,000
07-01-01 to 09-30-01			2,000
10-01-01 to 12-31-01			2,000

- Notes:
- (1) This value represents the highest melt/heat sulfur content observed during this reporting quarter from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
 - (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
 - (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

The CERTIFICATION OF DATA ACCURACY statement must be completed within thirty (30) days of the end of the reporting period. This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available upon request to the Chief or his (her) authorized representative.

I certify that, based on information and belief formed after reasonable inquiry, the statement and information contained in this quarterly report are true and accurate.

Signature:	Vice President & General Manager	
Responsible Official	Title	Date:

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30
and
Title V of the Clean Air Act

Permit Number: **R30-01100007-2023**
Application Received: **May 25, 2023**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 379.2 km Easting • 4252.30 km Northing • Zone 17
Directions: Interstate 64W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately 120 different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions		2022 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Carbon Monoxide (CO)	182.6	267.9	71.97
Nitrogen Oxides (NO _x)	636.9	314.6	83.01
Particulate Matter (PM _{2.5})	1093.9	130.9	11.19
Particulate Matter (PM ₁₀)	1093.9	130.9	30.26
Total Particulate Matter (TSP)	1278.4	130.9	21.25
Sulfur Dioxide (SO ₂)	8.92	8.92	3.65
Volatile Organic Compounds (VOC)	53.9	51.0	8.45

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions		2022 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Nickel (Ni)	190.8	27.2	6.60
Chromium (Cr)	56.0	7.6	2.06
Hydrochloric Acid (HCl)	20.0	3.9	1.06
Hexane (C6H14)	5.8	5.8	0

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 182.6 tons per year of CO, 636.9 tons per year of NO_x, 1093.9 tons per year of PM₁₀, 190.8 tons per year of nickel, 56.0 tons per year of chromium, and 20.0 tons per year of hydrochloric acid. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR2 PM limits on boilers

	45CSR6	Open burning prohibited.
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, administrative updates, temporary permits, general permits, permission to commence construction, and procedures for evaluation.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	HAP Emission Standards for Part 63 Sources
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 CFR 63 subpart N	Chromium Electroplating MACT
	40 CFR 63 subpart DDDDD	Boiler and Process Heater MACT
	40 CFR 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR§21-30	VOC limits

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0137	March 24, 1975	
R13-1165	November 3, 1989	
R13-1646A	March 5, 2015	
R13-1767	October 17, 1994	
R13-2163A	December 20, 2010	
R13-2532I	February 25, 2016	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is the fourth renewal of the Title V Permit. Since there were no changes to the emission units or control devices, there were no changes to CAM applicability or the existing CAM plans. The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes:

- **Condition 2.1.3.** – This condition was updated to delete the word “such” which was removed from 45CSR30 effective March 31, 2023. The reference was changed from 45CSR§30-2.12 to 45CSR§30-2.39. because the definition of “Secretary” was renumbered in a previous version of 45CSR30.
- **Condition 2.11.4.** - The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.
- **Conditions 2.17., 3.5.7. and 3.5.8.a.1.** – These conditions were deleted and replaced with “Reserved” because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it was repealed.
- **Condition 3.5.3.** - The US EPA contact information and address were updated.
- **Condition 3.5.4.** – This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- **Condition 3.5.8.a.2.** – This condition was updated to replace the word “telefax” with “email” according to the change in 45CSR30 effective March 31, 2023.

Updated Permit Language Due to Rule/Regulation Language Changes:

- **Condition 4.1.8.b.** – This condition was amended to match updated 40 CFR 63 Subpart DDDDD. In the last sentence of the paragraph, the word “Tables” was added to the phrase “Tables 11 through 13” and then 13 was changed to 15.

Updated Permit Language to Correct a Typographical Error:

- **Condition 4.5.3.c.** – In the first sentence, a typo was corrected by changing “subpart DDDD” to “subpart DDDDD.”

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA, AAa and AAb - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

Point of Contact

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application - R30-01100007-2023

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Thu, Oct 12, 2023 at 9:51 AM

Dan,

Attached are my comments on the permit and fact sheet. After you find out about the facility's PTEs, please send me the revised permit and fact sheet along with a copy of the notice.

Thanks,
Carrie

On Fri, Oct 6, 2023 at 7:12 PM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

Mr. Khetani,

Good afternoon, The DAQ has been reviewing your renewal application and a draft/proposed permit and fact sheet are attached for your review. There have been no change in the equipment or operations at the facility since the 2018 renewal permit was issued, but several permit conditions were updated due the boilerplate changes, a change in the language in a regulation and two minor typographical errors. These updates are detailed in the Determinations and Justifications section of the draft/proposed fact sheet. The draft/proposed permit still contains the updates in order to be easier to review... deletions are noted in red with strikeout and additions are in blue and underlined.

The only question I have at this time is regarding the facility's PTE listed in the draft/proposed fact sheet in the Plantwide Emissions Summary Table. Please refer to the following summary table I have prepared for comparison. All emission limits listed are in TPY (tons per year).

	Fact Sheets			Renewal Applications
	2018	2013	2008	Item 23. Facility-Wide Emissions Summary
				2023 / 2018 / 2013
CO	182.6	177.23	173.35	267.9
NOx	636.9	630.55	625.93	314.6
PM2.5	1093.9	1092.56	-----	-----
PM10	1093.9	1092.56	1085	130.9
PM	1278.4	1277	1277	130.9
SO2	8.92	4.18	4.18	8.92
VOC	53.9	53.5	53.5	51.0
Ni	190.8	190.78	190.78	27.2
Cr	56.0	56.01	56.0	7.6
HCl	20.0	20	20.0	3.9
Hexane	5.8	5.8	-----	5.8

In my research, I have not found an explanation as to why the PTE listed in the renewal applications from 2023, 2018 and 2013 remained the same and were not used in the approved fact sheets from 2018, 2013 and 2008. But it seems that the PTE listed in the fact sheets are corrected and reflect changes made over the years. Therefore, it appears that the PTE from the 2018 fact sheet should still be valid since there have been no changes in equipment or operations at the facility since the current permit and fact sheet were approved in 2018.

Please review the attached draft/proposed permit and fact sheet and offer any comments. Also, please comment on the PTE discussion above.

Sincerely,

Dan Roberts

WV Department of Environmental Protection

Division of Air Quality

Title V Permitting Section

304-926-0499 ext. 41902

Daniel.p.roberts@wv.gov

2 attachments



DPFactSheet R30-01100007-2023 10-6-23 Carrie's comments.doc
119K



DPPermit R30-01100007-2023 10-6-23 Carrie's comments.docx
393K

West Virginia Department of Environmental Protection

*Harold D. Ward
Cabinet Secretary*

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Huntington Alloys Corporation
Huntington WV Facility
R30-01100007-2023

Laura M. Crowder
Director, Division of Air Quality

*Issued: Draft/Proposed • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior
to expiration]*

Permit Number: **R30-01100007-2023**
Permittee: **Huntington Alloys Corporation**
Facility Name: **Huntington WV Facility**
Permittee Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 C Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Huntington, Cabell County, West Virginia
Facility Mailing Address:	3200 Riverside Drive, Huntington, WV 25705
Telephone Number:	(304) 526-5100
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of Nickel
SIC Codes:	3356
UTM Coordinates:	379.2 <u>km</u> Easting \$ 4252.30 <u>km</u> Northing \$ Zone 17

Permit Writer: Daniel P. Roberts

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Melt Shop					
B-1-P	B-1-S	Main Boiler	1952	80 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B		#5 Electric Arc Furnace	1971	35,000 lbs/hr	
MS-1A		Argon Oxygen Reactor	1971	35,000 lbs/hr	
MS-1E-P		Wire Feeder	2005	70,000 lbs/hr	
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr	Baghouse PM-6 & 25-C
PM-6-P		Southwest Grinder	1974		
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr	Baghouses PM-8A-C, PM-8B-C & PM-26-C
PM-8-P		Northwest Grinder	1966		
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C
PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None

PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-4-P	SM-4-S	United Mill	1967	7,000 lbs/hr	Mist Elim. SM-4-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr	None
BW-12-P		Wire Looping Section #2	1971		
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P, CD-2-P	CD-1-S, CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P, CD-4-P	CD-3-S, CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P, CD-6-P	CD-5-S, CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None

CD-7-P, CD-8-P	CD-7-S, CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P, CD-10-P	CD-9-S, CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P, CD-12-P	CD-11-S, CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P, CD-14-P	CD-13-S, CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5,708 lbs/hr	Baghouse/Cyclone CD- 40-C
Carpenter Shop					
CA-1-P, CA-2-P	CA-1-S, CA-2-S	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C, Baghouse TP-7A-3C
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None

TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-14-P	TP-14-S	Arc Slicer	2013	1,500 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-17-P	TP-17-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-18-P	TP-18-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0137	March 24, 1975
R13-1165	November 3, 1989
R13-1646A	March 5, 2015
R13-1767	October 17, 1994
R13-2163A	December 20, 2010
R13-2532I	February 25, 2016

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other ~~such~~ person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12 39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.3940]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a. ~~and 45CSR38~~]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§305.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. ~~and 45CSR38~~]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the

remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§305.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.11. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§7-10. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.12. The permittee shall burn natural gas meeting the FERC requirements exclusively for all furnaces.

[45CSR§30-12.7.]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment,

such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 2254(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13 - R13-2163 condition 4.4.1., R13-2532 condition 5.4.1.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. **Fugitives.** The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.]

- 3.4.5. **Fugitives.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic

format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV
25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. ~~Certified emissions statement~~**Fees.** The permittee shall ~~submit a certified emissions statement and~~ pay fees on an annual basis in accordance with ~~the submittal requirements of the Division of Air Quality~~ [45CSR§30-8.](#)
[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. Reserved.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or ~~telefax~~ email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA and AAa - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

4.0 Indirect Fired Fuel Burning Units Requirements [emission ~~point~~ unit IDs: B-1-P, B-4-P, SM-5-P, and CD-32-P]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. (B-1-P, B-4-P, CD-32-P, & SM-5-P)]
- 4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 9.54 pounds per hour for B-1-P and B-4-P.
[45CSR§2-4.1.b. (B-1-P & B-4-P)]
- 4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2. (B-1-P & B-4-P)]
- 4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (B-4-P)]
- 4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2. (B-1-P & B-4-P)]
- 4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 339.2 pounds per hour for B-1-P and B-4-P.
[45CSR§10-3.3.f. (B-1-P & B-4-P)]
- 4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]
- 4.1.8. **40 CFR 63, Subpart DDDDD.** The natural gas-fired boilers B-1-P, B-4-P, SM-5-P, and CD-32-P shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart

DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" no later than the existing source compliance date of January 31, 2016.

- a. 1. You must meet each emission limit and work practice standard in Table 3 to 40 CFR 63 subpart DDDDD that applies to your boiler, for each boiler at your source.
2. At all times, you must operate and maintain any affected source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 14.2.11. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 4.2.3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or [Tables](#) 11 through ~~13~~ [15](#) to this subpart, or the operating limits in Table 4 to 40 CFR 63 subpart DDDDD.

[45CSR34; 40 CFR §§63.7495(b), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart

DDDDD]

4.2. Monitoring Requirements

- 4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]
- 4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]
- 4.2.3. **How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?** You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you according to the methods specified in conditions a. through c. below
 - a. For boilers B-1-P and B-4-P, that have a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in conditions i. through vi. below. You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each annual tune-up must be no more than 13 months after the previous tune-up.

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in conditions A. through C. below,
 - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - B. A description of any corrective actions taken as a part of the tune-up; and
 - C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- b. For boilers SM-5-P and CD-32-P, that have a heat input capacity of less than 10 million Btu per hour, you must conduct a biennial tune-up of the boiler as specified in conditions a.i. through vi. to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
- c. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR34; 40 CFR §§63.7540(a)(10), (11), (13), 63.7515(d)]

4.3. Testing Requirements

- 4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c. (B-1-P, B-4-P)]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. (B-1-P & B-4-P)]

- 4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
2. Excess opacity does not exceed 40%.

- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;
2. The date and time of duration (with starting and ending times) of the period of excess emissions;
3. An estimate of the mass of excess emissions discharged during the malfunction period;
4. The maximum opacity measured or observed during the malfunction;
5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (B-1-P & B-4-P)]

- 4.5.3. a. For units that are subject only to a requirement to conduct annual, biennial, or 5-year tune-ups according to conditions 4.2.3. and 14.2.11, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs 1. through 4. below, instead of a semi-annual compliance report.
1. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in condition 4.1.8. and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in conditions 4.1.8. and 14.2.11.
 2. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
 3. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
 4. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.
- b. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
1. If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs i. through v. below.
 - i. Company and Facility name and address.
 - ii. Process unit information, emissions limitations, and operating parameter limitations.
 - iii. Date of report and beginning and ending dates of the reporting period.
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to condition 4.2.3. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled or unscheduled unit shutdown.
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. You must submit all reports required by Table 9 of 40 CFR subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- [45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]**

4.6. Compliance Plan

4.6.1. None.

5.0 Direct Fired Furnaces Requirements [emission point-unit IDs: PM-10A-P, PM-10B-P, PM-11-P, PM-12A-P, PM-12B-P, PM-13-P, PM-14-P, PM-15-P, PM-16-P, PM-17A-P, PM-17B-P, PM-18-P, PM-19-P, PM-23-P, PM-28-P, PM-29-P, SM-6-P, SM-7-P, BW-1A-P, BW-1B-P, BW-2-P, VM-2-P, VM-5-P, MA-4-P, MA-5-P]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§§7-3.1 and 3.2 and 45CSR13 - R13-1646 Condition 4.1.4., R13-1767 Condition B.1., and R13-2163 Condition 4.1.6.]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38
Ingot Furnace F-5	PM-13-P	11.2
Ingot Furnace F-6	PM-14-P	9
Ingot Furnace F-7	PM-15-P	9

[45CSR§7-4.1. and 45CSR13 - R13-2163 Condition 4.1.6.]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.; 45CSR13 - R13-1646 Condition 4.1.7.]

5.1.4. Emissions from the tip up furnaces shall not exceed the following:

	NO _x		SO ₂		CO		PM/PM ₁₀ /PM _{2.5}		VOCs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
MA-4-P	1.93	8.46	0.01	0.05	0.48	2.11	0.07	0.31	0.04	0.18
MA-5-P	1.45	6.34	0.01	0.04	1.22	5.33	0.11	0.48	0.08	0.35
Total	3.38	14.80	0.02	0.09	1.70	7.44	0.18	0.79	0.12	0.53

For MA-4-P and MA-5-P, compliance with the PM limits demonstrates compliance with the PM emission limits from 45CSR§7-4.1.

[45CSR13 - R13-1646, Conditions 4.1.1. & 4.1.6. and 45CSR§7-4.1.]

- 5.1.5. Natural gas consumption by the furnaces shall not exceed the following:

Furnace	Natural gas usage (cubic feet per hour)
MA-4-P	13,800
MA-5-P	14,476

[45CSR13 - R13-1646, Condition 4.1.2.]

- 5.1.6. The furnaces shall not process bars/rods in excess of the following:

Furnace	Pounds of rods/bars per hour
MA-4-P	20,000
MA-5-P	30,000

[45CSR13 - R13-1646, Condition 4.1.3.]

- 5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0 x 106 Btu/hr.

[45CSR13 - R13-1767, Condition A.1. (PM-23-P)]

- 5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

Particulates	0.075 lb/hr
Sulfur Dioxide	0.015 lb/hr
Nitrogen Oxide	2.5 lb/hr
Carbon Monoxide	0.875 lb/hr
Total Hydrocarbons	0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1767, Condition A.2. and 45CSR§7-4.1. (PM-23-P)]

- 5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.

[45CSR13 - R13-1767, Condition A.3. (PM-23-P)]

- 5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.

[45CSR13 - R13-1767, Condition A.4. (PM-23-P)]

- 5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission rate for Two Furnaces	
	lb/hr	tons/yr ⁽²⁾	lb/hr	tons/yr
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: ⁽¹⁾ Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

⁽²⁾ Annual emissions are based on an operating schedule of 8,760 hours per year.

Compliance with the PM limits demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-2163, Conditions 4.1.1. and 4.1.6. and 45CSR§7-4.1. (PM-28-P and PM-29-P)]

- 5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.

[45CSR13 - R13-2163, Condition 4.1.2. (PM-28-P and PM-29-P)]

- 5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NOx burners for each furnace not to exceed 1.25 MM Btu/hr heat input).

[45CSR13 - R13-2163, Condition 4.1.3. (PM-28-P and PM-29-P)]

- 5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).

[45CSR13 - R13-2163, Condition 4.1.4. (PM-28-P and PM-29-P)]

- 5.1.15. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-1646, Condition 4.1.5. (MA-4-P, MA-5-P)]

5.2. Monitoring Requirements

- 5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

- 5.2.2. In order to determine compliance with the opacity requirements of condition 5.1.1. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for Tip-up furnace MA-5-P.
- a. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.
 - b. Visible emissions checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.
 - c. If visible emissions are present at a source(s) the permittee shall take corrective action as soon as practicable, but within seventy-two (72) hours of the emission check. Once corrective action has been taken another observation shall be made to confirm that no visible emissions are present.

[45CSR13 - R13-1646, Condition 4.2.1.]

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

- 5.4.1. In order to determine compliance with condition 5.1.5. of this permit, the permittee shall maintain records showing the amount of natural gas fired monthly in furnaces MA-4-P and MA-5-P.
[45CSR13 - R13-1646, Condition 4.3.4.]
- 5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NO_x emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767, Condition B.2. and 45CSR§30-5.1.c. (PM-23-P)]
- 5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification

of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described. **[45CSR13-R13-2163, Condition 4.4.4. (PM-28-P and PM-29-P)]**

5.4.4.Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-1646, Condition 4.3.1. (MA-5-P)]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Hot Working Operations Requirements [emission ~~point~~-unit IDs: MS-1A, MS-1D, MS-1B, MS-1E-P, MS-2, PM-1&2P, PM-3-P, PM-20-P, BW-3-P, BW-12-P, BW-10-P, BW-11-P]

6.1. Limitations and Standards

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13
Wire Feeder	MS-1E-P	
#4 Electric Arc Furnace	MS-1D	11
#5 Electric Arc Furnace	MS-1B	11
Powder Torch	MS-2	5
#1 Primary Rolling Mill	PM-1&2P	24
Plasma Torch	PM-3-P	3
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1
Scholle Saw	BW-10-P	7.1
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1. (MS-1A, MS-1B, MS-1D)]

6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 ~~lbm/hr~~ lb/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1165, Specific Requirement (A) and 45CSR§7-4.1. (PM-20-P)]

6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.

[45CSR13 - R13-1165, Specific Requirement (B)]

6.2. Monitoring Requirements

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged into the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§10-8.2.c., 45CSR§30-5.1.c.]

6.2.3. The pressure drop through the baghouses shall be measured at the baghouse inlet and exhaust on a continuous basis. The pressure gauge, with a minimum accuracy of 0.5%, shall be calibrated quarterly and the pressure readings shall be checked daily for proper operation. The pressure drop across the baghouse shall be averaged daily. If the average falls below 2 inches of water or exceeds 8 inches of water, an excursion has occurred, and corrective action shall be taken as follows:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.2.4. Qualified personnel shall perform a weekly inspection of the baghouses in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

- 6.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 6.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 6.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 6.2.8. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 6.2.9. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 6.2.8.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 6.5.1.c for the reporting required when a QIP is implemented.
[40 CFR § 64.8; 45CSR§30-5.1.c.]

6.3. Testing Requirements

- 6.3.1. None.

6.4. Recordkeeping Requirements

- 6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]
- 6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.
[45CSR§10-8.2.c., 45CSR§30-5.1.c.]
- 6.4.3. The permittee shall record baghouse pressure drop readings taken in accordance with Section 6.2.3. of this permit on a continuous basis.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(b)(4) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.4. The permittee shall maintain records to document weekly baghouse inspections and any required maintenance.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.5. The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR § 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c., 40 C.F.R. § 64.9(b)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.5. Reporting Requirements

- 6.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.6. Compliance Plan

- 6.6.1. None.

7.0 Cold Working Operations Requirements [emission point-unit IDs: PM-4-P, PM-5-P, PM-25-P, PM-6-P, PM-7-P, PM-26-P, PM-8-P, SM-2-P, SM-3-P, SM-4-P, SM-10-P, CS-1-P, CS-2-P, CS-3-P, CS-4-P, CD-17-P, CD-23-P, CD-31-P, CD-39-P, CD-40-P]

7.1. Limitations and Standards

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99
Southeast Grinder	PM-5-P	2.99
Southcentral Grinder	PM-25-P	2.99
Southwest Grinder	PM-6-P	2.99
Northeast Grinder	PM-7-P	2.99
Northcentral Grinder	PM-26-P	2.99
Northwest Grinder	PM-8-P	2.99
CAP Shot Blaster	SM-2-P	9.15
MKW Rolling Mill	SM-3-P	6.68
United Rolling Mill	SM-4-P	6.04
Schluter Grinder	CS-1-P	0.41
Norton Grinder	CS-2-P	0.85
#1 Centro-M Grinder	CS-3-P	0.77
#2 Centro-M Grinder	CS-4-P	0.78
East Cutters (3 Saws)	CD-17-P	0.43
West Cutters (3 Saws)	CD-23-P	0.57
Grind Building Saw	CD-31-P	0.72
Rod Cell Saw	CD-39-P	1.20
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163, Condition 4.1.5]

7.2. Monitoring Requirements

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.2. The water level in the scrubber system shall be measured continuously and the fan operation shall be monitored continuously. The water level switch shall be tested quarterly and the fan operation monitor shall be checked daily. The water level shall be maintained via level switch and if the water is below the acceptable level, an excursion has occurred, and an alarm shall sound to notify the operator. In the event of an excursion:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Wet Scrubber SM-2-C)]

7.2.3. Qualified personnel shall perform a daily check of the scrubber system, and a monthly inspection of the scrubber system in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.1. (Baghouse/Cyclone CD-40-C)]

- 7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.2. (Baghouse/Cyclone CD-40-C)]
- 7.2.6. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 7.2.7. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 7.2.8. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 7.2.9. Response to Excursions or Exceedances:
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 7.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 7.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 7.5.1.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

7.3. Testing Requirements

- 7.3.1. None.

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records to document the daily checks, the monthly scrubber system inspections and any required maintenance.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2-C)]

- 7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163, Condition 4.4.2.]

- 7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163, Condition 4.4.3.]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.4.4.]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163, Condition 4.4.5.]

7.5. Reporting Requirements

7.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Wet Scrubber SM-2-C)]

7.6. Compliance Plan

7.6.1. None.

8.0 Woodworking Operations Requirements [emission ~~point~~-unit IDs: CA-1-P, CA-2-P, SC-1-P, SC-2-P]

8.1. Limitations and Standards

- 8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3
Woodcutting Operations	CA-2-P	3
Wood Saws	SC-1-P	1
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

- 8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

8.2. Monitoring Requirements

- 8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

8.3. Testing Requirements

- 8.3.1. None.

8.4. Recordkeeping Requirements

- 8.4.1. None.

8.5. Reporting Requirements

8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

9.0 Process Tanks Requirements [Pickling Tanks – emission ~~point~~-unit IDs: SM-1-P, CD-1-P, CD-2-P, CD-3-P, CD-4-P, CD-5-P, CD-6-P, CD-7-P, CD-8-P, CD-9-P, CD-10-P, CD-11-P, CD-12-P, CD-13-P, CD-14-P, CD-38-P]

9.1. Limitations and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 (Pickling Tanks)]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2. (Pickling Tanks)]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1. (Pickling Tanks)]

9.2. Monitoring Requirements

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

- 9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. None.

9.5. Reporting Requirements

- 9.5.1. None.

9.6. Compliance Plan

- 9.6.1. None.

10.0 Lime Storage Requirements [emission ~~point~~ unit ID: MS-9-P]

10.1. Limitations and Standards

- 10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]
- 10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]
- 10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

10.2. Monitoring Requirements

- 10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

- 10.3.1. None.

10.4. Recordkeeping Requirements

- 10.4.1. The permittee shall maintain the design information on the baghouse at the facility.
[45CSR§30-5.1.c.]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.

11.0 Degreaser Requirements

11.1. Limitations and Standards

- 11.1.1. The owner or operator of a cold cleaning facility shall equip the cleaner with a cover that is easily operated with one hand, if the solvent is agitated; provide a permanent, legible, conspicuous label, summarizing the operating requirements; store waste solvent in covered containers; close the cover whenever parts are not being handled in the cleaner; drain the cleaned parts until dripping ceases; and degrease only materials that are neither porous nor absorbent.

[45CSR§§21-30.3.a.1.B., 30.3.a.4, 30.3.a.5., 30.3.a.6., 30.3.a.7., 30.3.a.9. (Cold Solvent Degreasers)
State-Enforceable only.]

11.2. Monitoring Requirements

- 11.2.1. None.

11.3. Testing Requirements

- 11.3.1. None.

11.4. Recordkeeping Requirements

- 11.4.1. The owner or operator of any facility containing sources subject to section 30 of 45CSR21 shall comply with the requirements of 45CSR§21-5.2. regarding reports of excess emissions.

[45CSR§21-30.6.b. State-Enforceable only.]

11.5. Reporting Requirements

- 11.5.1. None.

11.6. Compliance Plan

- 11.6.1. None.

12.0 Chrome Plating Requirements [emission point-unit ID: CD-36-P]

12.1. Limitations and Standards

- 12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]
- 12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]
- 12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]
- 12.1.4. *Operation and maintenance practices.* All owners or operators subject to the standards of 40 CFR 63 subpart N are subject to these work practice standards.
1.
 - i. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.
 - ii. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - iii. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 2.
 - i. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
 - ii. Based on the results of a determination made under paragraph 2.i. above, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph 3. below for that source. Revisions may be required if the Administrator finds that the plan:
 - A. Does not address a malfunction that has occurred;
 - B. Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - C. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
 3. *Operation and maintenance plan.*
 - i. The owner or operator of an affected source subject to the work practices of condition 12.1.4. shall prepare an operation and maintenance plan to be implemented no later than the compliance date.

The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in A. through E. below.

- A. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
- B. For sources using an add-on control device or monitoring equipment to comply with 40 CFR 63, subpart N, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in the following Table:

Control Technique	Operation and maintenance practices	Frequency
PBS/CMP system	Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1/quarter
	Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	1/quarter
	Visually inspect ductwork from tank to the control device to ensure there are no leaks	1/quarter
	Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	Per manufacturer

- C. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - D. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
 - E. The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63, subpart N.
- ii. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
 - iii. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph 3.i. above, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.
 - iv. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep

previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

- v. To satisfy the requirements of paragraph 3. of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

[45CSR34 and 40 C.F.R. § 63.342(f)(3)]

- 12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.

[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

12.2. Monitoring Requirements

- 12.2.1. *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of 40 CFR 63 Subpart N shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

- a. *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of condition 12.1.3. shall comply with the monitoring requirements for composite mesh-pad systems as follows:

- i. During a performance test, the owner or operator of an affected source complying with the emission limitations in condition 12.1.3. through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1., and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in condition 12.3.1.c. An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.
- ii. The owner or operator of an affected source shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.
- iii. The owner or operator of an affected source complying with the emission limitations through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs a.i. or ii. above. To establish a new site-specific operating

parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs a.iii.A. through D. below.

- A. Determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1.b.;
 - B. Establish the site-specific operating parameter value using the procedures in condition 12.3.1.c.;
 - C. Satisfy the recordkeeping requirements in condition 12.4.1.6. through 12.4.1.8; and
 - D. Satisfy the reporting requirements in §§63.347(d) and (f).
- iv. The requirement to operate a composite mesh-pad system within the range of pressure drop values established under conditions 12.2.1.a.i. through iii. does not apply during automatic washdown cycles of the composite mesh-pad system.

[45CSR34 and 40 CFR §§ 63.343(c), (c)(1), and (c)(3)]

12.3. Testing Requirements

- 12.3.1. a. *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures below. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 1. through 9. below. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
1. A brief process description;
 2. Sampling location description(s);
 3. A description of sampling and analytical procedures and any modifications to standard procedures;
 4. Test results;
 5. Quality assurance procedures and results;
 6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
 7. Raw data sheets for field sampling and field and laboratory analyses;
 8. Documentation of calculations; and
 9. Any other information required by the test method.
- b. *Test methods.* Each owner or operator subject to the provisions of 40 CFR 63 subpart N shall use the test method identified below to demonstrate compliance with the standards in condition 12.1.3.

Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations,” appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths must demonstrate compliance with the emission limits of §63.342 by measuring the total chromium.

- c. The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with condition 12.2.1.a. may establish the pressure drop in accordance with the following guidelines:
 - i. Pressure taps shall be installed at any of the following locations:
 - A. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
 - B. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
 - C. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
 - ii. Pressure taps shall be sited at locations that are:
 - A. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
 - B. Situated such that no air infiltration at measurement site will occur that could bias the measurement.
 - iii. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
 - iv. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
 - v. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.
 - vi. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.
- [45CSR34 and 40 CFR §63.344(a), (c)(1), (d)(5)]**

12.4. Recordkeeping Requirements

- 12.4.1. a. The owner or operator of each affected source subject to the standards of 40 C.F.R. § 63.346 shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N.
- b. The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.
 1. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

2. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;
 3. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;
 4. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation when such actions are inconsistent with the operation and maintenance plan;
 5. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);
 6. Test reports documenting results of all performance tests;
 7. All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 C.F.R. § 63.344(e);
 8. Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
 9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
 10. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
 11. The total process operating time of the affected source during the reporting period;
 12. All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.
- c. All records shall be maintained for a period of 5 years in accordance with 40 C.F.R. § 63.10(b)(1).

[45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.346]

12.5. Reporting Requirements

- 12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.
[45CSR34 and 40 C.F.R. § 63.347(a)]
- 12.5.2. *Ongoing compliance status reports for major sources.* The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.

[45CSR34 and 40 C.F.R. §§ 63.342(f)(3)(iii) and 63.347(g)]

- 12.5.3. *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).

[45CSR34 and 40 C.F.R. § 63.347(g)(3)]

- 12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

12.6. Compliance Plan

- 12.6.1. None.

13.0 Thistle Processing, LLC Requirements [emission **point-unit IDs: TP-1P, TP-3P, TP-4P, TP-5P, TP-6P, TP-13-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]**

13.1. Limitations and Standards

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59
Plasma Cutter (TP-3P)	0.5	2.19
Arc Cutter 1 (TP-4P)	0.05	0.21
Arc Cutter 2 (TP-5P)	0.05	0.21
Arc Cutter 3 (TP-13-P)	0.03	0.13
Arc Cutter 4 (TP-15-P)	0.03	0.13
Arc Cutter 5 (TP-16-P)	0.03	0.13
Arc Cutter 6 (TP-17-P)	0.03	0.13
Arc Cutter 7 (TP-18-P)	0.03	0.13
Cabinet Blaster (TP-6P)	0.01	0.03
Viking Belt Blaster (TP-19-P)	0.05	0.19
Total	0.93	4.07

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1.

[45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day
Viking Belt Blaster	Pounds of Shot Used	600 pounds per day
Plasma Cutter	Pounds Cut	18,000 pounds per day
Cabinet Blasting	Pounds of Shot Used	200 pounds per day
Arc Cutting	Rods Used	3,360 per day ⁽¹⁾

⁽¹⁾ Note: This represents the amount to be used for all seven (7) arc cutters in total.

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.3. Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Condition 4.1.3.]

13.1.4. Particulate Matter emissions from the Tumble Blaster and Viking Belt Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster and Viking Belt Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Conditions 4.1.4. and 4.1.5]

13.1.5. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open

air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45CSR§7-3.1.]

- 13.1.6. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8. and 45-CSR-§7-5.1.]

- 13.1.7. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR13 - Permit R13-2532, Condition 4.1.9. and 45-CSR-§7-5.2.]

- 13.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 4.1.10. and 45CSR§13-5.11.]

13.2. Testing Requirements

- 13.2.1. None.

13.3. Monitoring and Recordkeeping Requirements

- 13.3.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1.]

- 13.3.2. For Baghouse TP-10C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

- 13.3.3. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 4.3.2.]

- 13.3.4. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 4.3.3.]

- 13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.
- b. The pounds of material cut by the plasma cutter.
- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4.]

13.4. Reporting Requirements

- 13.4.1. None.

13.5. Compliance Plan

- 13.5.1. None.

14.0 Recycled Scrap Metal Requirements [emission point-unit IDs: TP-2-P, TP-7A-P, TP-8A-P, TP-7B-P, TP-8B-P, TP-9-P, TP-10-P, TP-11-P, TP-12-P, TP-13-P, TP-14-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

14.1. Limitations and Standards

14.1.1. **Scrap Metal Nickel and Chromium Content.** The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.
[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.2. **Emission Point (TP-2-S) - Plasma Cutter PM and HAP Emissions.** The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Particulate Matter (PM)	0.5	1.75
Hazardous Air Pollutants (HAP) ⁽²⁾	0.43	1.49

⁽¹⁾ Based on operating the Plasma Cutter 8,760 hr/yr and an emission factor of maximum mass loss of 0.5 lb/hr and average mass loss of 0.4 lb/hr.

⁽²⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.2.]

14.1.3. **Control Equipment Guaranteed Collection Efficiencies.** The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 1 is in operation.
TP-7A-2C	Thermal Oxidizer		VOC	99	
TP-7A-3C	Baghouse		PM	99	
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal Oxidizer		VOC	99	
TP-8A-3C	Baghouse		PM	99	
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532, Condition 5.1.3.]

- 14.1.4. **Scrap Metal Processing Rates.** The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	Ton/yr	
TP-2-P	Plasma Cutter	5,000	21,900	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates.
TP-9-P	Scrap Metal Crusher	7,040 ⁽¹⁾	8,975 ⁽¹⁾	
TP-10-P	Shot/ Tumble Blaster	15,000	3,000	
TP-7A-P	Kiln 1	8,000	35,040	
TP-8A-P	Kiln 2	8,000	35,040	
TP-13-P	Arc Cutter	15,000	---	
TP-14-P	Arc Slicer	1,500	---	
TP-15-P	Arc Cutter	15,000	---	
TP-16-P	Arc Cutter	15,000	---	
TP-17-P	Arc Cutter	15,000	---	
TP-18-P	Arc Cutter	15,000	---	

⁽¹⁾ Crusher hourly and annual scrap metal processing rates cannot be increased for five (5) years from the date of issuance for R13-2532D. These rates were set here such that the 45CSR13 Modification Permitting Threshold limits of 2 lb/hr and 5 ton/yr for HAP emissions were not crossed.

[45CSR13 - Permit R13-2532, Condition 5.1.4.]

- 14.1.5. **Emission Point (TP-9-S) - Crusher PM Controls.** The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

- 14.1.6. **Emission Point (TP-9-S) - Crusher PM Emissions.** The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	1.75	2.20
⁽³⁾ Hazardous Air Pollutants (HAP)	1.49	1.90

⁽¹⁾ After controls [Electrostatic Precipitator (ESP) (Control Device ID No. TP-9-C)]. Based on an ESP control/removal efficiency of 88.3%.

⁽²⁾ Based on processing 7,040 lb/hr and 8,975 ton/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.6.]

- 14.1.7. **Maximum DHI Rates - NG Burner Equipment.** The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MMBtu/hr)	Comments
TP-11-P	TP-11-S	Wash Water Burner	0.83	Provides hot water to wash dirt, oil, & grease from scrap metal.
TP-12-P	TP-12-S	Rinse Water Burner	0.44	Provides hot water to rinse the scrap metal once it is washed.
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2	Provides indirect heat to Kiln 1 (TP-7A-P).
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2	Provides Indirect heat to Kiln 2 (TP-8A-P).
---	TP-7A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 1 (TP-7A-P). Vents into Kiln 1's exhaust stream/emission point.
---	TP-8A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 2 (TP-8A-P). Vents into Kiln 1's exhaust stream/emission point.

[45CSR13 - Permit R13-2532, Condition 5.1.7.]

- 14.1.8. **Emission Point (TP-11-S) - Wash Water Burner – NG Combustion Emissions.** Emission point (TP-11-S) associated with the Wash Water Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.3

⁽¹⁾ Based on operating the Wash Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.8.]

- 14.1.9. **Emission Point (TP-12-S) - Rinse Water Burner – NG Combustion Emissions.** Emission point (TP-12-S) associated with the Rinse Water Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

⁽¹⁾ Based on operating the Rinse Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.9.]

- 14.1.10. **Emission Point TP-10-P - Shot Blast PM Controls.** The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532, Condition 5.1.10.]

- 14.1.11. **Emission Point TP-10-P - Shot Blast PM Emissions.** Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Baghouse (Control Device TP-10-9C)]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 15,000 lb/hr and 6.00 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.11.]

- 14.1.12. **Emission Points TP-7B-P and TP-8B-P – Kiln Burners – NG Combustion Emissions.** Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.2	0.86
Carbon Monoxide (CO)	0.17	0.72

⁽¹⁾ Based on operating each Rotary Kiln Burner 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.12.]

- 14.1.13. **Emission Points TP-7A-P – Kiln 1 Exhaust Controls.** The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A-2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.13.]

- 14.1.14. **Emission Points TP-8A-P – Kiln 2 Exhaust Controls.** The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.14.]

- 14.1.15. **Emission Points TP-7A-P and TP-8A-P – Kiln Exhaust Emissions.** Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr ⁽¹⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.8	2.46
Nitrogen Oxide (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic Compounds	0.8	3.55

⁽¹⁾ After controls [one (1) Cyclone, one (1) Thermal Oxidizer, and one Baghouse per each kiln].

⁽²⁾ Based on operating each Rotary Burn-off Kiln 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.15.]

- 14.1.16. **Fuel Burning Equipment Opacity Limit – NG Burner:** Wash Water, Rinse Water, Kiln 1, Kiln 2. No

person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.16.]

- 14.1.17. **Fuel Burning Unit Emission Rate Limitation – NG Burner Equipment:** Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type ‘b’ fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.’s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§§2-4.1. and 4.1.b.; 45CSR13 - Permit R13-2532, Condition 5.1.18]

- 14.1.18. **Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

- 14.1.19. **Process PM Emission Weight Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

- 14.1.20. **Sulfur Dioxide (SO₂) In-stack Concentration Limitation – Kiln 1 and Kiln 2 Exhausts.** No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.22.]

- 14.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 14.1.3. and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 5.1.23.]

- 14.1.22. **Emission Point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) - Arc Cutter PM & HAP Emissions.** The emission point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) associated with the Arc Cutter (TP-13-P, TP-15-P, TP-16-P, TP-17-P, and TP-18-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

14.1.23. **Emission Point (TP-14-S) - Arc Slicer PM & HAP Emissions.** The emission point (TP-14-S) associated with the Arc Slicer (TP-14-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.02	0.07
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 0.404 lb/hr and an emission factor(s) for electrode type E6011.

⁽²⁾ Based on operating 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.27.]

14.1.24. **Emission Point (TP-19-S) - Viking Belt Blaster PM & HAP Emissions.** The emission point (TP-19-S) associated with the Viking Belt Blaster (TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.05	0.19
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Internal Baghouse]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 600 lb/hr and 5.26 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.28.]

14.1.25. **40 CFR 63 Subpart DDDDD.** The natural-gas fired equipment, Wash Water, Rinse Water, Kiln 1, Kiln 2, shall comply with all applicable requirements in accordance with condition 4.1.8.

[45CSR34; 40 CFR §§63.7495(a), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

14.2. Monitoring Requirements

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shut down when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection;

filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532, Condition 5.2.1.]

- 14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532, Condition 5.2.2.]

- 14.2.4. **Commencement of operation.** The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.

[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

- 14.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

- 14.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR § 64.7(c); 45CSR§30-5.1.c.]

- 14.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

- 14.2.8. **Excursions.** An excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation.

[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

- 14.2.9. Response to Excursions or Exceedances:

- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 14.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 14.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

- 14.2.11. You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you for the equipment listed in condition 14.1.25. according to the methods specified in condition 4.2.3.a.i. through vi. You must conduct a tune-up of the boiler or process heater every 5 years. You may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new source, the first 5-year tune-up must be no later than 61 months after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

[45CSR34; 40 CFR §§63.7540(a)(10), (12), ~~(13)~~, 63.7515(d)]

14.3. Testing Requirements

- 14.3.1. **Opacity Testing.** To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4. Recordkeeping Requirements

- 14.4.1. Records, Operation and Compliance.

- a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and

chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

- b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.
- c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.
- d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.
- e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.
- f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.
- g. To demonstrate compliance with Section 14.1.23. and 14.1.24., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.
- h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

- 14.4.2. **Equipment Maintenance Records.** The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.3. **Certification of Information.** Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 14.1.3., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 14.1.3., the permittee shall maintain records of the occurrence and duration of any

malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.6. **Opacity Records.** The permittee shall maintain records of the monitoring data required in Section 14.3.1, documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

- 14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

- 14.4.8. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

- 14.4.9. **General recordkeeping requirements for CAM:**

- a. The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of

monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[45CSR§30-5.1.c. and 40 C.F.R. §64.9 (b)]

14.5. Reporting Requirements

- 14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

- 14.5.2. **General reporting requirements for CAM.** A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.9(a)(2)]

- 14.5.3. You must submit reports in accordance with condition 4.5.3.

[45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]

14.6. Compliance Plan

- 14.6.1. None.

Appendix A - 45CSR2 and 45CSR10 Monitoring Plans

Regulation 2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type 'b' sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1	Main Boiler	80.0	$(80.0)(0.09) = 7.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3 \text{ \#/hr}$
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 2 – Applicable Requirements:

1. West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
2. Main Boiler (B-1) and VIM Boiler (B-4) have inputs of 80.0 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Start-up and shut-down records are kept for both of these sources.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.

Regulation 10 – To Prevent and Control Air Pollution from the emission of Sulfur Oxides:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type 'b' sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1	Main Boiler	80.0	$(80.0)(0.09) = 7.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3 \text{ \#/hr}$
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 10 – Applicable Requirements:

1. West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.

- These two sources are covered under the Title V permit application for this facility.

- These two sources are exempt from the provisions of Regulation 10 and 10A due to a MMBTU/Hr burner rating of less than 10MMBTU/Hr. These two sources burn natural gas only and do not burn a process gas that contains hydrogen sulfide.

2. Main Boiler (B-1) and VIM Boiler (B-4) have inputs of 80.0 MMBTU/Hr and 26.0 MMBTU/Hr respectively.

- These two sources are covered under the Title V permit application for this facility.

- These two sources are exempt from Regulation 10 and 10A due to combustion of natural gas only and do not burn a process gas that contains hydrogen sulfide. Monthly gas usage and gas sulfur content records are kept for both of these sources.

- Exempt from Regulation 10, section 8 testing, monitoring, recordkeeping and reporting requirements due to the combustion of natural gas only in both of these sources.

Manufacturing Process Sources - Regulation 10 Applicability

**Direct Combustion Sources – Direct Natural Gas Fired Processes
 Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates**

	Huntington Alloys – Products of Natural Gas Combustion Description	Tons per Year - Potential to Emit – SO ₂ HA-SCM Emission Point #	Capacity GAS MMBTU/hr	SO ₂ ** Allowable lbs/hour	PTE Sulfur Max PPM Nat. Gas	PTE SO ₂ Ton/Year	PTE SO ₂ Pound/Yr	PTE SO ₂ Pound/Hr
Direct Fired Sources	F-11 Reheat Fce	PM-9A	26.7	82.8	<10.0 PPM	0.053	107	0.012
	F-12- Reheat Fce	PM-9B	26.7	82.8	<10.0 PPM	0.053	107	0.012
	F-21 Forge Fce	PM-10A	8.9	27.6	<10.0 PPM	0.018	36	0.004
	F-22 Forge Fce	PM-10B	8.9	27.6	<10.0 PPM	0.018	36	0.004
	F-3 Farge Fce	PM-11	112.0	347.2	<10.0 PPM	0.224	448	0.051
	F-41 Ingot Fce	PM-12A	14.4	44.6	<10.0 PPM	0.029	58	0.007
	F-42 Ingot Fce	PM-12B	14.4	44.6	<10.0 PPM	0.029	58	0.007
	F-5 Ingot Fce	PM-13	60.0	186.0	<10.0 PPM	0.120	240	0.027
	F-6 Ingot Fce	PM-14	52.8	163.7	<10.0 PPM	0.106	211	0.024
	F-7 Ingot Fce	PM-15	52.8	163.7	<10.0 PPM	0.106	211	0.024
	F-8 Ingot Fce	PM-16	52.8	163.7	<10.0 PPM	0.106	211	0.024
	F-91 Ingot Fce	PM-17A	14.3	44.3	<10.0 PPM	0.029	57	0.007
	F-92 Ingot Fce	PM-17B	14.3	44.3	<10.0 PPM	0.029	57	0.007
	#1 CB Fce	PM-18	84.8	262.9	<10.0 PPM	0.170	339	0.039
	#2 CB Fce	PM-19	20.8	64.5	<10.0 PPM	0.042	83	0.010
	E Steckel Reheat	PM-21	19.3	59.8	<10.0 PPM	0.039	77	0.009
	W Steckel Reheat	PM-22	19.3	59.8	<10.0 PPM	0.039	77	0.009
	F-101 Forge Fce	PM-28	13.6	42.2	<10.0 PPM	0.027	54	0.006
	F-102 Forge Fce	PM-29	13.6	42.2	<10.0 PPM	0.027	54	0.006
	Tank #59 Dryer	CD-15	1.0	3.1	<10.0 PPM	0.002	4	0.000
	Drying Tank #2	CD-18	1.0	3.1	<10.0 PPM	0.002	4	0.000
	Drying Tank #3	CD-19	2.0	6.2	<10.0 PPM	0.004	8	0.001
	#2 CAF Fce	CD-20	7.0	21.7	<10.0 PPM	0.014	28	0.003
	#3 CAF Fce	CD-21	7.5	23.3	<10.0 PPM	0.015	30	0.003
	#4 CAF Fce	CD-22	6.1	18.9	<10.0 PPM	0.012	24	0.003
	#10A Fce	CD-24 (NO)	3.0	9.3	<10.0 PPM	0.006	12	0.001
	Squeeze Point	CD-25	0.5	1.6	<10.0 PPM	0.001	2	0.000
	CAP Fces	SM-9	49.5	153.5	<10.0 PPM	0.099	198	0.023
	BAL Drier	SM-11	1.0	3.1	<10.0 PPM	0.002	4	0.000
	23" Mill Fce #1	BW-1A	40.0	124.0	<10.0 PPM	0.080	160	0.018
	23" Mill Fce #2	BW-1B	40.0	124.0	<10.0 PPM	0.080	160	0.018
	Walking Beam Fce	BW-2	30.0	93.0	<10.0 PPM	0.060	120	0.014
	MS E. Ladle Rht	MS-4A	2.0	6.2	<10.0 PPM	0.004	8	0.001
	MS W. Ladle Rht	MS-4B	1.0	3.1	<10.0 PPM	0.002	4	0.000
	New W. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002
	New E. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002
	AOD Vessel Rht	MS-7	10.0	30.8	<10.0 PPM	0.020	40	0.005
	Rotary Hearth	AR-1 (NO)	4.0	12.4	<10.0 PPM	0.008	16	0.002
	Tip-Up Fce	PM-24	14.0	43.4	<10.0 PPM	0.028	56	0.006
	Stress Relief Fce	VM-1	4.5	14.0	<10.0 PPM	0.009	18	0.002
Mold Preheat	VM-2	6.0	18.6	<10.0 PPM	0.012	24	0.003	
VIM Drying Oven	VM-3	1.4	4.3	<10.0 PPM	0.003	6	0.001	
VIM Ladle Preheat	VM-4	1.8	5.6	<10.0 PPM	0.004	7	0.001	
VIM Fce Shell Htr	VM-	1.5	4.7	<10.0 PPM	0.003	6	0.001	
Rod Heat Treat	MA-4	13.8	42.8	<10.0 PPM	0.028	55	0.006	
Plate Anneal Fce	PM-23	25.0	77.5	<10.0 PPM	0.050	100	0.011	

Indirect Fired Sources	Main Boiler	B-1	80.0	248.0	<10.0 PPM	0.160	320	0.037
	VIM Boiler	B-4	26.0	80.6	<10.0 PPM	0.052	104	0.012
	WP Salt Bath	CD-32	7.2	22.3	<10.0 PPM	0.014	29	0.003
	CAP Salt Bath	SM-5,6,7	2.7	8.4	<10.0 PPM	0.005	11	0.001

** = MMBTU/HR X 3.1 per Regulation 10

PTE – Based on 8,760 hours of operation

(NO) = Not Operational

Manufacturing Process Sources - Regulation 10 Applicability

**Huntington Plant Melting Department – Electric Arc Furnaces and Argon Oxygen Decarburization Vessel
 Applicability Determination and Compliance Monitoring Method**

•These sources are covered under the Title V permit application for this facility.

•Due to the fact that these sources have the potential to emit Sulfur dioxide in amounts that exceed 500 pounds per year, a monitoring plan, as required by regulation 10 and 10A, has been instituted for these sources. The monitoring plan will identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured by the Huntington Plant analytical laboratory in total percent sulfur by weight. This number will then be directly converted to an estimated maximum monthly concentration of sulfur dioxide emitted from the dust collector. The chart below details the format of the monthly report.

**Huntington Alloys – Huntington Plant
 Regulation 10 – Sulfur Dioxide Monitoring
 Electric Arc Furnace – AOD Melting Department**

Month/Year: _____

Month	Highest Monthly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum monthly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
January			2,000
February			2,000
March			2,000
April			2,000
May			2,000
June			2,000
July			2,000
August			2,000
September			2,000
October			2,000
November			2,000
December			2,000

- Note:
- (1) This value represents the highest melt/heat sulfur content observed during this reporting month from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
 - (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
 - (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant Cold Drawing Department – West & East Pickle House – Sulfuric Acid Pickling Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- Stack testing of Sulfuric Acid pickling processes has shown that they do not produce sulfur dioxide air emissions as a result of operations. Sulfuric Acid Pickling produces sulfuric acid (H₂SO₄) mist emissions that are not covered by Regulation 10. These sources are in compliance with the WV Office of Air Quality limitations for sulfuric acid mist emissions under Regulation 7.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant - All other production processes not previously listed Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- No other sources, other than those previously listed, have the capability of producing Sulfur Dioxide air emissions at the Huntington Facility.

Regulation 10 – Sulfur Dioxide Monitoring Electric Arc Furnace – AOD Melting Department

Quarter:	Year:
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Quarter	Highest Quarterly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum quarterly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
01-01-01 to 03-31-01			2,000
04-01-01 to 06-30-01			2,000
07-01-01 to 09-30-01			2,000
10-01-01 to 12-31-01			2,000

Notes:

- (1) This value represents the highest melt/heat sulfur content observed during this reporting quarter from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
- (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
- (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

The CERTIFICATION OF DATA ACCURACY statement must be completed within thirty (30) days of the end of the reporting period.

This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available upon request to the Chief or his (her) authorized representative.

I certify that, based on information and belief formed after reasonable inquiry, the statement and information contained in this quarterly report are true and accurate.

Signature:	Vice President & General Manager	
Responsible Official	Title	Date:

Fact Sheet



For Draft/**Proposed** Renewal Permitting Action Under 45CSR30
and
Title V of the Clean Air Act

Permit Number: **R30-01100007-2023**
Application Received: **May 25, 2023**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 379.2 km Easting • 4252.30 km Northing • Zone 17
Directions: Interstate 64W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately 120 different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions		2021 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Carbon Monoxide (CO)	182.6	267.9	41.58
Nitrogen Oxides (NO _x)	636.9	314.6	45.23
Particulate Matter (PM _{2.5})	1093.9	130.9	11.59
Particulate Matter (PM ₁₀)	1093.9	130.9	30.80
Total Particulate Matter (TSP)	1278.4	130.9	16.81
Sulfur Dioxide (SO ₂)	8.92	8.92	0.29
Volatile Organic Compounds (VOC)	53.9	51.0	3.77

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions		2021 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Nickel (Ni)	190.8	27.2	7.11
Chromium (Cr)	56.0	7.6	2.31
Hydrochloric Acid (HCl)	20.0	3.9	1.10
Hexane (C ₆ H ₁₄)	5.8	5.8	0

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 182.6 tons per year of CO, 636.9 tons per year of NO_x, 1093.9 tons per year of PM₁₀, 190.8 tons per year of nickel, 56.0 tons per year of chromium, and 20.0 tons per year of hydrochloric acid. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR2 PM limits on boilers

	45CSR6	Open burning prohibited.
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	HAP Emission Standards for Part 63 Sources
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 CFR 63 subpart N	Chromium Electroplating MACT
	40 CFR 63 subpart DDDDD	Boiler and Process Heater MACT
	40 CFR 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR§21-30	VOC limits

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0137	March 24, 1975	
R13-1165	November 3, 1989	
R13-1646A	March 5, 2015	
R13-1767	October 17, 1994	
R13-2163A	December 20, 2010	
R13-2532I	February 25, 2016	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a fourth renewal of the Title V Permit. The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes:

- **Condition 2.1.3.** – This condition was updated to delete the word “such” which was removed from 45CSR30 effective March 31, 2023. The reference was changed from 45CSR§30-2.12 to 45CSR§30-2.39. because the definition of “Secretary” was renumbered in a previous version of 45CSR30.
- **Condition 2.11.4.** - The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.
- **Conditions 2.17., 3.5.7. and 3.5.8.a.1.** – These conditions were deleted and replaced with “Reserved” because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it was repealed.
- **Condition 3.5.3.** - The US EPA contact information and address were updated.
- **Condition 3.5.4.** – This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- **Condition 3.5.8.a.2.** – This condition was updated to replace the word “telefax” with “email” according to the change in 45CSR30 effective March 31, 2023.

Updated Permit Language Due to Rule/Regulation Language Changes:

- Condition 4.1.8.b. – This condition was amended to match updated 40 CFR 63 Subpart ~~DDDDD~~. In the last sentence of the paragraph, the word “Tables” was added to the phrase “Tables 11 through 13” and then 13 was changed to 15.

Updated Permit Language to Correct Typographical Errors:

- Condition 4.5.3.c. – In the first sentence, a typo was corrected by changing “subpart DDDD” to “subpart DDDDD.”
- Condition 6.1.4. – In the first sentence, a typo was corrected by changing “0.025 lbm/hr” to “0.025 lb/hr.”

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of

- the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR§ 60.110b(b).
 - e. 40 CFR Part 60, Subparts AA and AAa - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
 - f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
 - g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

Point of Contact

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application - R30-01100007-2023

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>

Fri, Oct 6, 2023 at 7:12 PM

To: jkhetani@precastcorp.com

Cc: tom.bell@specialmetals.com, "Felty, Roger" <Roger.Felty@arcadis.com>, "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>

Mr. Khetani,

Good afternoon, The DAQ has been reviewing your renewal application and a draft/proposed permit and fact sheet are attached for your review. There have been no change in the equipment or operations at the facility since the 2018 renewal permit was issued, but several permit conditions were updated due the boilerplate changes, a change in the language in a regulation and two minor typographical errors, These updates are detailed in the Determinations and Justifications section of the draft/proposed fact sheet. The draft/proposed permit still contains the updates in order to be easier to review... deletions are noted in red with strikeout and additions are in blue and underlined.

The only question I have at this time is regarding the facility's PTE listed in the draft/proposed fact sheet in the Plantwide Emissions Summary Table. Please refer to the following summary table I have prepared for comparison. All emission limits listed are in TPY (tons per year).

	Fact Sheets			Renewal Applications
	2018	2013	2008	Item 23. Facility-Wide Emissions Summary
	<u>2018</u>	<u>2013</u>	<u>2008</u>	<u>2023 / 2018 / 2013</u>
CO	182.6	177.23	173.35	267.9
NOx	636.9	630.55	625.93	314.6
PM2.5	1093.9	1092.56	-----	-----
PM10	1093.9	1092.56	1085	130.9
PM	1278.4	1277	1277	130.9
SO2	8.92	4.18	4.18	8.92
VOC	53.9	53.5	53.5	51.0
Ni	190.8	190.78	190.78	27.2
Cr	56.0	56.01	56.0	7.6
HCl	20.0	20	20.0	3.9
Hexane	5.8	5.8	-----	5.8

In my research, I have not found an explanation as to why the PTE listed in the renewal applications from 2023, 2018 and 2013 remained the same and were not used in the approved fact sheets from 2018, 2013 and 2008. But it seems that the PTE listed in the fact sheets are corrected and reflect changes made over the years. Therefore, it appears that the PTE from the 2018 fact sheet should still be valid since there have been no changes in equipment or operations at the facility since the current permit and fact sheet were approved in 2018.

Please review the attached draft/proposed permit and fact sheet and offer any comments. Also, please comment on the PTE discussion above.

Sincerely,

Dan Roberts

WV Department of Environmental Protection

Division of Air Quality

Title V Permitting Section

304-926-0499 ext. 41902

Daniel.p.roberts@wv.gov

2 attachments



DPPermit R30-01100007-2023 10-6-23.docx

376K



DPFactSheet R30-01100007-2023 10-6-23.doc

114K

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Huntington Alloys Corporation
Huntington WV Facility
R30-01100007-2023

Laura M. Crowder
Director, Division of Air Quality

Issued: Draft/Proposed • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]

Permit Number: **R30-01100007-2023**
Permittee: **Huntington Alloys Corporation**
Facility Name: **Huntington WV Facility**
Permittee Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 C Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Huntington, Cabell County, West Virginia
Facility Mailing Address:	3200 Riverside Drive, Huntington, WV 25705
Telephone Number:	(304) 526-5100
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of Nickel
SIC Codes:	3356
UTM Coordinates:	379.2 Easting \$ 4252.30 Northing \$ Zone 17

Permit Writer: Daniel P. Roberts

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Melt Shop					
B-1-P	B-1-S	Main Boiler	1952	80 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B		#5 Electric Arc Furnace	1971	35,000 lbs/hr	
MS-1A		Argon Oxygen Reactor	1971	35,000 lbs/hr	
MS-1E-P		Wire Feeder	2005	70,000 lbs/hr	
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr	Baghouse PM-6 & 25-C
PM-6-P		Southwest Grinder	1974		
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr	Baghouses PM-8A-C, PM-8B-C & PM-26-C
PM-8-P		Northwest Grinder	1966		
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C
PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None

PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-4-P	SM-4-S	United Mill	1967	7,000 lbs/hr	Mist Elim. SM-4-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr	None
BW-12-P		Wire Looping Section #2	1971		
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P, CD-2-P	CD-1-S, CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P, CD-4-P	CD-3-S, CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P, CD-6-P	CD-5-S, CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None

CD-7-P, CD-8-P	CD-7-S, CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P, CD-10-P	CD-9-S, CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P, CD-12-P	CD-11-S, CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P, CD-14-P	CD-13-S, CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5,708 lbs/hr	Baghouse/Cyclone CD- 40-C
Carpenter Shop					
CA-1-P, CA-2-P	CA-1-S, CA-2-S	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C, Baghouse TP-7A-3C
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None

TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-14-P	TP-14-S	Arc Slicer	2013	1,500 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-17-P	TP-17-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-18-P	TP-18-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0137	March 24, 1975
R13-1165	November 3, 1989
R13-1646A	March 5, 2015
R13-1767	October 17, 1994
R13-2163A	December 20, 2010
R13-2532I	February 25, 2016

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other ~~such~~ person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12 39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.3940]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a. ~~and 45CSR38~~]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§305.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B.]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the

remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§305.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.11. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§7-10. and 45CSR13 - R13-2163, Condition 4.1.6.]

- 3.1.12. The permittee shall burn natural gas meeting the FERC requirements exclusively for all furnaces.

[45CSR§30-12.7.]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment,

such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a sourcespecific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 2254(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. **Fugitives.** The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.]

- 3.4.5. **Fugitives.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic

format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV
25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Certified emissions statement.** The permittee shall ~~submit a certified emissions statement and~~ pay fees on an annual basis in accordance with ~~the submittal requirements of the Division of Air Quality~~ [45CSR§30-8](#). **[45CSR§30-8.]**
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. Reserved.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or ~~telefax~~ email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR § 60.110b(b).
- e. 40 CFR Part 60, Subparts AA and AAa - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
- f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
- g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

4.0 Indirect Fired Fuel Burning Units Requirements [emission point IDs: B-1-P, B-4-P, SM-5-P, and CD-32-P]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. (B-1-P, B-4-P, CD-32-P, & SM-5-P)]
- 4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 9.54 pounds per hour for B-1-P and B-4-P.
[45CSR§2-4.1.b. (B-1-P & B-4-P)]
- 4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2. (B-1-P & B-4-P)]
- 4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (B-4-P)]
- 4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2. (B-1-P & B-4-P)]
- 4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 339.2 pounds per hour for B-1-P and B-4-P.
[45CSR§10-3.3.f. (B-1-P & B-4-P)]
- 4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]
- 4.1.8. **40 CFR 63, Subpart DDDDD.** The natural gas-fired boilers B-1-P, B-4-P, SM-5-P, and CD-32-P shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart

DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" no later than the existing source compliance date of January 31, 2016.

- a. 1. You must meet each emission limit and work practice standard in Table 3 to 40 CFR 63 subpart DDDDD that applies to your boiler, for each boiler at your source.
2. At all times, you must operate and maintain any affected source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- b. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 14.2.11. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 4.2.3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or [Tables](#) 11 through ~~13~~ [15](#) to this subpart, or the operating limits in Table 4 to 40 CFR 63 subpart DDDDD.

[45CSR34; 40 CFR §§63.7495(b), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart

DDDDD]

4.2. Monitoring Requirements

- 4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]
- 4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]
- 4.2.3. **How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?** You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you according to the methods specified in conditions a. through c. below
 - a. For boilers B-1-P and B-4-P, that have a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in conditions i. through vi. below. You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each annual tune-up must be no more than 13 months after the previous tune-up.

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in conditions A. through C. below,
 - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - B. A description of any corrective actions taken as a part of the tune-up; and
 - C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- b. For boilers SM-5-P and CD-32-P, that have a heat input capacity of less than 10 million Btu per hour, you must conduct a biennial tune-up of the boiler as specified in conditions a.i. through vi. to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
- c. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR34; 40 CFR §§63.7540(a)(10), (11), (13), 63.7515(d)]

4.3. Testing Requirements

- 4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.c. (B-1-P, B-4-P)]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. (B-1-P & B-4-P)]

- 4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
2. Excess opacity does not exceed 40%.

- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;
2. The date and time of duration (with starting and ending times) of the period of excess emissions;
3. An estimate of the mass of excess emissions discharged during the malfunction period;
4. The maximum opacity measured or observed during the malfunction;
5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (B-1-P & B-4-P)]

- 4.5.3. a. For units that are subject only to a requirement to conduct annual, biennial, or 5-year tune-ups according to conditions 4.2.3. and 14.2.11, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs 1. through 4. below, instead of a semi-annual compliance report.
1. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in condition 4.1.8. and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in conditions 4.1.8. and 14.2.11.
 2. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
 3. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
 4. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.
- b. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
1. If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs i. through v. below.
 - i. Company and Facility name and address.
 - ii. Process unit information, emissions limitations, and operating parameter limitations.
 - iii. Date of report and beginning and ending dates of the reporting period.
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to condition 4.2.3. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled or unscheduled unit shutdown.
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. You must submit all reports required by Table 9 of 40 CFR subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- [45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]**

4.6. Compliance Plan

4.6.1. None.

5.0 Direct Fired Furnaces Requirements [emission point IDs: PM-10A-P, PM-10B-P, PM-11-P, PM-12A-P, PM-12B-P, PM-13-P, PM-14-P, PM-15-P, PM-16-P, PM-17A-P, PM-17B-P, PM-18-P, PM-19-P, PM-23-P, PM-28-P, PM-29-P, SM-6-P, SM-7-P, BW-1A-P, BW-1B-P, BW-2-P, VM-2-P, VM-5-P, MA-4-P, MA-5-P]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§§7-3.1 and 3.2 and 45CSR13 - R13-1646 Condition 4.1.4., R13-1767 Condition B.1., and R13-2163 Condition 4.1.6.]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38
Ingot Furnace F-5	PM-13-P	11.2
Ingot Furnace F-6	PM-14-P	9
Ingot Furnace F-7	PM-15-P	9

[45CSR§7-4.1. and 45CSR13 - R13-2163 Condition 4.1.6.]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.; 45CSR13 - R13-1646 Condition 4.1.7.]

5.1.4. Emissions from the tip up furnaces shall not exceed the following:

	NO _x		SO ₂		CO		PM/PM ₁₀ /PM _{2.5}		VOCs	
	lb/hr	tpy	lb/hr	Tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
MA-4-P	1.93	8.46	0.01	0.05	0.48	2.11	0.07	0.31	0.04	0.18
MA-5-P	1.45	6.34	0.01	0.04	1.22	5.33	0.11	0.48	0.08	0.35
Total	3.38	14.80	0.02	0.09	1.70	7.44	0.18	0.79	0.12	0.53

For MA-4-P and MA-5-P, compliance with the PM limits demonstrates compliance with the PM emission limits from 45CSR§7-4.1.

[45CSR13 - R13-1646, Conditions 4.1.1. & 4.1.6. and 45CSR§7-4.1.]

- 5.1.5. Natural gas consumption by the furnaces shall not exceed the following:

Furnace	Natural gas usage (cubic feet per hour)
MA-4-P	13,800
MA-5-P	14,476

[45CSR13 - R13-1646, Condition 4.1.2.]

- 5.1.6. The furnaces shall not process bars/rods in excess of the following:

Furnace	Pounds of rods/bars per hour
MA-4-P	20,000
MA-5-P	30,000

[45CSR13 - R13-1646, Condition 4.1.3.]

- 5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0 x 106 Btu/hr.

[45CSR13 - R13-1767, Condition A.1. (PM-23-P)]

- 5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

Particulates	0.075 lb/hr
Sulfur Dioxide	0.015 lb/hr
Nitrogen Oxide	2.5 lb/hr
Carbon Monoxide	0.875 lb/hr
Total Hydrocarbons	0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1767, Condition A.2. and 45CSR§7-4.1. (PM-23-P)]

- 5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.

[45CSR13 - R13-1767, Condition A.3. (PM-23-P)]

- 5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.

[45CSR13 - R13-1767, Condition A.4. (PM-23-P)]

- 5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission rate for Two Furnaces	
	lb/hr	tons/yr ⁽²⁾	lb/hr	tons/yr
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: ⁽¹⁾ Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

⁽²⁾ Annual emissions are based on an operating schedule of 8,760 hours per year.

Compliance with the PM limits demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-2163, Conditions 4.1.1. and 4.1.6. and 45CSR§7-4.1. (PM-28-P and PM-29-P)]

- 5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.

[45CSR13 - R13-2163, Condition 4.1.2. (PM-28-P and PM-29-P)]

- 5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NOx burners for each furnace not to exceed 1.25 MM Btu/hr heat input).

[45CSR13 - R13-2163, Condition 4.1.3. (PM-28-P and PM-29-P)]

- 5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).

[45CSR13 - R13-2163, Condition 4.1.4. (PM-28-P and PM-29-P)]

- 5.1.15. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - R13-1646, Condition 4.1.5. (MA-4-P, MA-5-P)]

5.2. Monitoring Requirements

- 5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

- 5.2.2. In order to determine compliance with the opacity requirements of condition 5.1.1. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for Tip-up furnace MA-5-P.
- a. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.
 - b. Visible emissions checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.
 - c. If visible emissions are present at a source(s) the permittee shall take corrective action as soon as practicable, but within seventy-two (72) hours of the emission check. Once corrective action has been taken another observation shall be made to confirm that no visible emissions are present.

[45CSR13 - R13-1646, Condition 4.2.1.]

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

- 5.4.1. In order to determine compliance with condition 5.1.5. of this permit, the permittee shall maintain records showing the amount of natural gas fired monthly in furnaces MA-4-P and MA-5-P.
[45CSR13 - R13-1646, Condition 4.3.4.]
- 5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NO_x emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767, Condition B.2. and 45CSR§30-5.1.c. (PM-23-P)]
- 5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a “Responsible Official” within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a “Responsible Official” within thirty (30) days after the end of the calendar year utilizing the Certification

of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described. **[45CSR13-R13-2163, Condition 4.4.4. (PM-28-P and PM-29-P)]**

5.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-1646, Condition 4.3.1. (MA-5-P)]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Hot Working Operations Requirements [emission point IDs: MS-1A, MS-1D, MS-1B, MS-1E-P, MS-2, PM-1&2P, PM-3-P, PM-20-P, BW-3-P, BW-12-P, BW-10-P, BW-11-P]

6.1. Limitations and Standards

- 6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor Wire Feeder	MS-1A MS-1E-P	13
#4 Electric Arc Furnace	MS-1D	11
#5 Electric Arc Furnace	MS-1B	11
Powder Torch	MS-2	5
#1 Primary Rolling Mill	PM-1&2P	24
Plasma Torch	PM-3-P	3
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1
Scholle Saw	BW-10-P	7.1
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

- 6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

- 6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1. (MS-1A, MS-1B, MS-1D)]

- 6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 ~~lbm/hr~~ lb/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.

[45CSR13 - R13-1165, Specific Requirement (A) and 45CSR§7-4.1. (PM-20-P)]

- 6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.

[45CSR13 - R13-1165, Specific Requirement (B)]

6.2. Monitoring Requirements

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged into the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§10-8.2.c., 45CSR§30-5.1.c.]

6.2.3. The pressure drop through the baghouses shall be measured at the baghouse inlet and exhaust on a continuous basis. The pressure gauge, with a minimum accuracy of 0.5%, shall be calibrated quarterly and the pressure readings shall be checked daily for proper operation. The pressure drop across the baghouse shall be averaged daily. If the average falls below 2 inches of water or exceeds 8 inches of water, an excursion has occurred, and corrective action shall be taken as follows:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.2.4. Qualified personnel shall perform a weekly inspection of the baghouses in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

- 6.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 6.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 6.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 6.2.8. **Response to Excursions or Exceedances:**
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 6.2.9. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 6.2.8.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 6.5.1.c for the reporting required when a QIP is implemented.
[40 CFR § 64.8; 45CSR§30-5.1.c.]

6.3. Testing Requirements

- 6.3.1. None.

6.4. Recordkeeping Requirements

- 6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]
- 6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.
[45CSR§10-8.2.c., 45CSR§30-5.1.c.]
- 6.4.3. The permittee shall record baghouse pressure drop readings taken in accordance with Section 6.2.3. of this permit on a continuous basis.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(b)(4) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.4. The permittee shall maintain records to document weekly baghouse inspections and any required maintenance.
[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]
- 6.4.5. The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR § 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c., 40 C.F.R. § 64.9(b)(1) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.5. Reporting Requirements

- 6.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Baghouses MS-1-C1, MS-1-C2, and MS-2-C)]

6.6. Compliance Plan

- 6.6.1. None.

7.0 Cold Working Operations Requirements [emission point IDs: PM-4-P, PM-5-P, PM-25-P, PM-6-P, PM-7-P, PM-26-P, PM-8-P, SM-2-P, SM-3-P, SM-4-P, SM-10-P, CS-1-P, CS-2-P, CS-3-P, CS-4-P, CD-17-P, CD-23-P, CD-31-P, CD-39-P, CD-40-P]

7.1. Limitations and Standards

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99
Southeast Grinder	PM-5-P	2.99
Southcentral Grinder	PM-25-P	2.99
Southwest Grinder	PM-6-P	2.99
Northeast Grinder	PM-7-P	2.99
Northcentral Grinder	PM-26-P	2.99
Northwest Grinder	PM-8-P	2.99
CAP Shot Blaster	SM-2-P	9.15
MKW Rolling Mill	SM-3-P	6.68
United Rolling Mill	SM-4-P	6.04
Schluter Grinder	CS-1-P	0.41
Norton Grinder	CS-2-P	0.85
#1 Centro-M Grinder	CS-3-P	0.77
#2 Centro-M Grinder	CS-4-P	0.78
East Cutters (3 Saws)	CD-17-P	0.43
West Cutters (3 Saws)	CD-23-P	0.57
Grind Building Saw	CD-31-P	0.72
Rod Cell Saw	CD-39-P	1.20
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163, Condition 4.1.6.]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163, Condition 4.1.5]

7.2. Monitoring Requirements

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.2. The water level in the scrubber system shall be measured continuously and the fan operation shall be monitored continuously. The water level switch shall be tested quarterly and the fan operation monitor shall be checked daily. The water level shall be maintained via level switch and if the water is below the acceptable level, an excursion has occurred, and an alarm shall sound to notify the operator. In the event of an excursion:

- a. The owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- b. The corrective action shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[45CSR§30-5.1.c., 40 C.F.R. §§ 64.3(a)(1) and (a)(2), and 40 C.F.R. § 64.7(d) (Wet Scrubber SM-2C)]

7.2.3. Qualified personnel shall perform a daily check of the scrubber system, and a monthly inspection of the scrubber system in accordance with a P/M checklist.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2C)]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.1. (Baghouse/Cyclone CD-40-C)]

- 7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.2.2. (Baghouse/Cyclone CD-40-C)]
- 7.2.6. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]
- 7.2.7. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR § 64.7(c); 45CSR§30-5.1.c.]
- 7.2.8. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]
- 7.2.9. Response to Excursions or Exceedances:
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 7.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 7.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 7.5.1.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

7.3. Testing Requirements

- 7.3.1. None.

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records to document the daily checks, the monthly scrubber system inspections and any required maintenance.

[45CSR§30-5.1.c., 40 C.F.R. § 64.3(a)(1) (Wet Scrubber SM-2C)]

- 7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163, Condition 4.4.2.]

- 7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163, Condition 4.4.3.]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163, Condition 4.4.4.]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163, Condition 4.4.5.]

7.5. Reporting Requirements

7.5.1. The owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii). A report for monitoring shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 C.F.R. § 64.9(a) (Wet Scrubber SM-2C)]

7.6. Compliance Plan

7.6.1. None.

8.0 Woodworking Operations Requirements [emission point IDs: CA-1-P, CA-2-P, SC-1-P, SC-2-P]

8.1. Limitations and Standards

- 8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3
Woodcutting Operations	CA-2-P	3
Wood Saws	SC-1-P	1
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

- 8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

8.2. Monitoring Requirements

- 8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

8.3. Testing Requirements

- 8.3.1. None.

8.4. Recordkeeping Requirements

- 8.4.1. None.

8.5. Reporting Requirements

- 8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

9.0 Process Tanks Requirements [Pickling Tanks – emission point IDs: SM-1-P, CD-1-P, CD-2-P, CD-3-P, CD-4-P, CD-5-P, CD-6-P, CD-7-P, CD-8-P, CD-9-P, CD-10-P, CD-11-P, CD-12-P, CD-13-P, CD-14-P, CD-38-P]

9.1. Limitations and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 (Pickling Tanks)]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2. (Pickling Tanks)]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1. (Pickling Tanks)]

9.2. Monitoring Requirements

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

- 9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. None.

9.5. Reporting Requirements

- 9.5.1. None.

9.6. Compliance Plan

- 9.6.1. None.

10.0 Lime Storage Requirements [emission point ID: MS-9-P]

10.1. Limitations and Standards

- 10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]
- 10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]
- 10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

10.2. Monitoring Requirements

- 10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

- 10.3.1. None.

10.4. Recordkeeping Requirements

- 10.4.1. The permittee shall maintain the design information on the baghouse at the facility.
[45CSR§30-5.1.c.]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.

11.0 Degreaser Requirements

11.1 Limitations and Standards

- 11.1.1. The owner or operator of a cold cleaning facility shall equip the cleaner with a cover that is easily operated with one hand, if the solvent is agitated; provide a permanent, legible, conspicuous label, summarizing the operating requirements; store waste solvent in covered containers; close the cover whenever parts are not being handled in the cleaner; drain the cleaned parts until dripping ceases; and degrease only materials that are neither porous nor absorbent.

[45CSR§§21-30.3.a.1.B., 30.3.a.4, 30.3.a.5., 30.3.a.6., 30.3.a.7., 30.3.a.9. (Cold Solvent Degreasers)]

11.2 Monitoring Requirements

- 11.2.1. None.

11.3 Testing Requirements

- 11.3.1. None.

11.4 Recordkeeping Requirements

- 11.4.1. The owner or operator of any facility containing sources subject to section 30 of 45CSR21 shall comply with the requirements of 45CSR§21-5.2. regarding reports of excess emissions.

[45CSR§21-30.6.b.]

11.5 Reporting Requirements

- 11.5.1. None.

11.6 Compliance Plan

- 11.6.1. None.

12.0 Chrome Plating Requirements [emission point ID: CD-36-P]

12.1. Limitations and Standards

- 12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]
- 12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]
- 12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]
- 12.1.4. *Operation and maintenance practices.* All owners or operators subject to the standards of 40 CFR 63 subpart N are subject to these work practice standards.
1.
 - i. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.
 - ii. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - iii. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 2.
 - i. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
 - ii. Based on the results of a determination made under paragraph 2.i. above, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph 3. below for that source. Revisions may be required if the Administrator finds that the plan:
 - A. Does not address a malfunction that has occurred;
 - B. Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - C. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
 3. *Operation and maintenance plan.*
 - i. The owner or operator of an affected source subject to the work practices of condition 12.1.4. shall prepare an operation and maintenance plan to be implemented no later than the compliance date.

The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in A. through E. below.

- A. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
- B. For sources using an add-on control device or monitoring equipment to comply with 40 CFR 63, subpart N, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in the following Table:

Control Technique	Operation and maintenance practices	Frequency
PBS/CMP system	Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1/quarter
	Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	1/quarter
	Visually inspect ductwork from tank to the control device to ensure there are no leaks	1/quarter
	Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	Per manufacturer

- C. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - D. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
 - E. The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63, subpart N.
- ii. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
 - iii. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph 3.i. above, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.
 - iv. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep

previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

- v. To satisfy the requirements of paragraph 3. of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

[45CSR34 and 40 C.F.R. § 63.342(f)(3)]

- 12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.

[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

12.2. Monitoring Requirements

- 12.2.1. *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of 40 CFR 63 Subpart N shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

- a. *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of condition 12.1.3. shall comply with the monitoring requirements for composite mesh-pad systems as follows:

- i. During a performance test, the owner or operator of an affected source complying with the emission limitations in condition 12.1.3. through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1., and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in condition 12.3.1.c. An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.
- ii. The owner or operator of an affected source shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.
- iii. The owner or operator of an affected source complying with the emission limitations through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs a.i. or ii. above. To establish a new site-specific operating

parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs a.iii.A. through D. below.

- A. Determine the outlet chromium concentration using the test methods and procedures in condition 12.3.1.b.;
 - B. Establish the site-specific operating parameter value using the procedures in condition 12.3.1.c.;
 - C. Satisfy the recordkeeping requirements in condition 12.4.1.6. through 12.4.1.8; and
 - D. Satisfy the reporting requirements in §§63.347(d) and (f).
- iv. The requirement to operate a composite mesh-pad system within the range of pressure drop values established under conditions 12.2.1.a.i. through iii. does not apply during automatic washdown cycles of the composite mesh-pad system.

[45CSR34 and 40 CFR §§ 63.343(c), (c)(1), and (c)(3)]

12.3. Testing Requirements

- 12.3.1. a. *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures below. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 1. through 9. below. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
1. A brief process description;
 2. Sampling location description(s);
 3. A description of sampling and analytical procedures and any modifications to standard procedures;
 4. Test results;
 5. Quality assurance procedures and results;
 6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
 7. Raw data sheets for field sampling and field and laboratory analyses;
 8. Documentation of calculations; and
 9. Any other information required by the test method.
- b. *Test methods.* Each owner or operator subject to the provisions of 40 CFR 63 subpart N shall use the test method identified below to demonstrate compliance with the standards in condition 12.1.3.

Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations,” appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths must demonstrate compliance with the emission limits of §63.342 by measuring the total chromium.

- c. The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with condition 12.2.1.a. may establish the pressure drop in accordance with the following guidelines:
 - i. Pressure taps shall be installed at any of the following locations:
 - A. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
 - B. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
 - C. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
 - ii. Pressure taps shall be sited at locations that are:
 - A. Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
 - B. Situated such that no air infiltration at measurement site will occur that could bias the measurement.
 - iii. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
 - iv. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
 - v. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.
 - vi. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.
- [45CSR34 and 40 CFR §63.344(a), (c)(1), (d)(5)]**

12.4. Recordkeeping Requirements

- 12.4.1. a. The owner or operator of each affected source subject to the standards of 40 C.F.R. § 63.346 shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N.
- b. The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.
 1. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

2. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;
 3. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;
 4. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
 5. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);
 6. Test reports documenting results of all performance tests;
 7. All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 C.F.R. § 63.344(e);
 8. Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
 9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
 10. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
 11. The total process operating time of the affected source during the reporting period;
 12. All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.
- c. All records shall be maintained for a period of 5 years in accordance with 40 C.F.R. § 63.10(b)(1).

[45CSR34 and 40 C.F.R. § 63.346]

12.5. Reporting Requirements

12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.

[45CSR34 and 40 C.F.R. § 63.347(a)]

12.5.2. *Ongoing compliance status reports for major sources.* The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.

[45CSR34 and 40 C.F.R. § 63.347(g)]

12.5.3. *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).

[45CSR34 and 40 C.F.R. § 63.347(g)(3)]

12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

12.6. Compliance Plan

12.6.1. None.

13.0 Thistle Processing, LLC Requirements [emission point IDs: TP-1P, TP-3P, TP-4P, TP-5P, TP-6P, TP-13-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

13.1. Limitations and Standards

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59
Plasma Cutter (TP-3P)	0.5	2.19
Arc Cutter 1 (TP-4P)	0.05	0.21
Arc Cutter 2 (TP-5P)	0.05	0.21
Arc Cutter 3 (TP-13-P)	0.03	0.13
Arc Cutter 4 (TP-15-P)	0.03	0.13
Arc Cutter 5 (TP-16-P)	0.03	0.13
Arc Cutter 6 (TP-17-P)	0.03	0.13
Arc Cutter 7 (TP-18-P)	0.03	0.13
Cabinet Blaster (TP-6P)	0.01	0.03
Viking Belt Blaster (TP-19-P)	0.05	0.19
Total	0.93	4.07

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1.

[45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day
Viking Belt Blaster	Pounds of Shot Used	600 pounds per day
Plasma Cutter	Pounds Cut	18,000 pounds per day
Cabinet Blasting	Pounds of Shot Used	200 pounds per day
Arc Cutting	Rods Used	3,360 per day ⁽¹⁾

⁽¹⁾ Note: This represents the amount to be used for all seven (7) arc cutters in total.

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.3. Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Condition 4.1.3.]

13.1.4. Particulate Matter emissions from the Tumble Blaster and Viking Belt Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster and Viking Belt Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532, Conditions 4.1.4. and 4.1.5]

13.1.5. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open

air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45CSR§7-3.1.]

- 13.1.6. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8. and 45 CSR §7-5.1.]

- 13.1.7. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR13 - Permit R13-2532, Condition 4.1.9. and 45 CSR §7-5.2.]

- 13.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 4.1.10. and 45CSR§13-5.11.]

13.2. Testing Requirements

- 13.2.1. None.

13.3. Monitoring and Recordkeeping Requirements

- 13.3.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1.]

- 13.3.2. For Baghouse TP-10C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

- 13.3.3. **Record of Maintenance of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 4.3.2.]

- 13.3.4. **Record of Malfunctions of Air Pollution Control Equipment.** For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 4.3.3.]

- 13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.
- b. The pounds of material cut by the plasma cutter.
- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4.]

13.4. Reporting Requirements

- 13.4.1. None.

13.5. Compliance Plan

- 13.5.1. None.

14.0 Recycled Scrap Metal Requirements [emission point IDs: TP-2-P, TP-7A-P, TP-8A-P, TP-7B-P, TP-8B-P, TP-9-P, TP-10-P, TP-11-P, TP-12-P, TP-13-P, TP-14-P, TP-15-P, TP-16-P, TP-17-P, TP-18-P, TP-19-P]

14.1. Limitations and Standards

14.1.1. **Scrap Metal Nickel and Chromium Content.** The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.
[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.2. Emission Point (TP-2-S) - Plasma Cutter PM and HAP Emissions. The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Particulate Matter (PM)	0.5	1.75
Hazardous Air Pollutants (HAP) ⁽²⁾	0.43	1.49

⁽¹⁾ Based on operating the Plasma Cutter 8,760 hr/yr and an emission factor of maximum mass loss of 0.5 lb/hr and average mass loss of 0.4 lb/hr.

⁽²⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.2.]

14.1.3. **Control Equipment Guaranteed Collection Efficiencies.** The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 1 is in operation.
TP-7A-2C	Thermal Oxidizer		VOC	99	
TP-7A-3C	Baghouse		PM	99	
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal Oxidizer		VOC	99	
TP-8A-3C	Baghouse		PM	99	
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532, Condition 5.1.3.]

- 14.1.4. **Scrap Metal Processing Rates.** The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	Ton/yr	
TP-2-P	Plasma Cutter	5,000	21,900	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates.
TP-9-P	Scrap Metal Crusher	7,040 ⁽¹⁾	8,975 ⁽¹⁾	
TP-10-P	Shot/ Tumble Blaster	15,000	3,000	
TP-7A-P	Kiln 1	8,000	35,040	
TP-8A-P	Kiln 2	8,000	35,040	
TP-13-P	Arc Cutter	15,000	---	
TP-14-P	Arc Slicer	1,500	---	
TP-15-P	Arc Cutter	15,000	---	
TP-16-P	Arc Cutter	15,000	---	
TP-17-P	Arc Cutter	15,000	---	
TP-18-P	Arc Cutter	15,000	---	

⁽¹⁾ Crusher hourly and annual scrap metal processing rates cannot be increased for five (5) years from the date of issuance for R13-2532D. These rates were set here such that the 45CSR13 Modification Permitting Threshold limits of 2 lb/hr and 5 ton/yr for HAP emissions were not crossed.

[45CSR13 - Permit R13-2532, Condition 5.1.4.]

- 14.1.5. **Emission Point (TP-9-S) - Crusher PM Controls.** The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

- 14.1.6. **Emission Point (TP-9-S) - Crusher PM Emissions.** The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	1.75	2.20
⁽³⁾ Hazardous Air Pollutants (HAP)	1.49	1.90

⁽¹⁾ After controls [Electrostatic Precipitator (ESP) (Control Device ID No. TP-9-C)]. Based on an ESP control/removal efficiency of 88.3%.

⁽²⁾ Based on processing 7,040 lb/hr and 8,975 ton/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.6.]

- 14.1.7. **Maximum DHI Rates - NG Burner Equipment.** The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MMBtu/hr)	Comments
TP-11-P	TP-11-S	Wash Water Burner	0.83	Provides hot water to wash dirt, oil, & grease from scrap metal.
TP-12-P	TP-12-S	Rinse Water Burner	0.44	Provides hot water to rinse the scrap metal once it is washed.
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2	Provides indirect heat to Kiln 1 (TP-7A-P).
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2	Provides Indirect heat to Kiln 2 (TP-8A-P).
---	TP-7A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 1 (TP-7A-P). Vents into Kiln 1's exhaust stream/emission point.
---	TP-8A-S	Smoke Hood Burner	0.75	Located on the exit side of Kiln 2 (TP-8A-P). Vents into Kiln 1's exhaust stream/emission point.

[45CSR13 - Permit R13-2532, Condition 5.1.7.]

- 14.1.8. **Emission Point (TP-11-S) - Wash Water Burner – NG Combustion Emissions.** Emission point (TP-11-S) associated with the Wash Water Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.3

⁽¹⁾ Based on operating the Wash Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.8.]

- 14.1.9. **Emission Point (TP-12-S) - Rinse Water Burner – NG Combustion Emissions.** Emission point (TP-12-S) associated with the Rinse Water Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

⁽¹⁾ Based on operating the Rinse Water Burner 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.9.]

- 14.1.10. **Emission Point TP-10-P - Shot Blast PM Controls.** The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532, Condition 5.1.10.]

- 14.1.11. **Emission Point TP-10-P - Shot Blast PM Emissions.** Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾⁽²⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Baghouse (Control Device TP-10-9C)]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 15,000 lb/hr and 6.00 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.11.]

- 14.1.12. **Emission Points TP-7B-P and TP-8B-P – Kiln Burners – NG Combustion Emissions.** Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr	tpy ⁽¹⁾
Nitrogen Oxide (NO _x)	0.2	0.86
Carbon Monoxide (CO)	0.17	0.72

⁽¹⁾ Based on operating each Rotary Kiln Burner 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.12.]

- 14.1.13. **Emission Points TP-7A-P – Kiln 1 Exhaust Controls.** The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A-2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.13.]

- 14.1.14. **Emission Points TP-8A-P – Kiln 2 Exhaust Controls.** The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532, Condition 5.1.14.]

- 14.1.15. **Emission Points TP-7A-P and TP-8A-P – Kiln Exhaust Emissions.** Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Maximum Emission Rate per Emission Point	
	lb/hr ⁽¹⁾	tpy ⁽¹⁾⁽²⁾
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.8	2.46
Nitrogen Oxide (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic Compounds	0.8	3.55

⁽¹⁾ After controls [one (1) Cyclone, one (1) Thermal Oxidizer, and one Baghouse per each kiln].

⁽²⁾ Based on operating each Rotary Burn-off Kiln 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.15.]

- 14.1.16. **Fuel Burning Equipment Opacity Limit – NG Burner:** Wash Water, Rinse Water, Kiln 1, Kiln 2. No

person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.16.]

- 14.1.17. **Fuel Burning Unit Emission Rate Limitation – NG Burner Equipment:** Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type ‘b’ fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.’s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§§2-4.1. and 4.1.b.; 45CSR13 - Permit R13-2532, Condition 5.1.18]

- 14.1.18. **Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

- 14.1.19. **Process PM Emission Weight Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter, Arc Slicer.** No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

- 14.1.20. **Sulfur Dioxide (SO₂) In-stack Concentration Limitation – Kiln 1 and Kiln 2 Exhausts.** No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.22.]

- 14.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 14.1.3. and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532, Condition 5.1.23.]

- 14.1.22. **Emission Point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) - Arc Cutter PM & HAP Emissions.** The emission point (TP-13-S, TP-15-S, TP-16-S, TP-17-S, and TP-18-S) associated with the Arc Cutter (TP-13-P, TP-15-P, TP-16-P, TP-17-P, and TP-18-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

14.1.23. **Emission Point (TP-14-S) - Arc Slicer PM & HAP Emissions.** The emission point (TP-14-S) associated with the Arc Slicer (TP-14-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.02	0.07
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 0.404 lb/hr and an emission factor(s) for electrode type E6011.

⁽²⁾ Based on operating 8,760 hr/yr

[45CSR13 - Permit R13-2532, Condition 5.1.27.]

14.1.24. **Emission Point (TP-19-S) - Viking Belt Blaster PM & HAP Emissions.** The emission point (TP-19-S) associated with the Viking Belt Blaster (TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.05	0.19
Hazardous Air Pollutants (HAP) ⁽³⁾	0.04	0.01

⁽¹⁾ After controls [Internal Baghouse]. Based on a Baghouse control/removal efficiency of 99.9%.

⁽²⁾ Based on processing 600 lb/hr and 5.26 MM lb/yr of scrap metal.

⁽³⁾ Based on a Nickel and Chromium content for the scrap metal of 60% and 25%, respectively.

[45CSR13 - Permit R13-2532, Condition 5.1.28.]

14.1.25. **40 CFR 63 Subpart DDDDD.** The natural-gas fired equipment, Wash Water, Rinse Water, Kiln 1, Kiln 2, shall comply with all applicable requirements in accordance with condition 4.1.8.

[45CSR34; 40 CFR §§63.7495(a), 63.7500(a)(1) and (3), (e), and Table 3 to 40 CFR 63 subpart DDDDD]

14.2. Monitoring Requirements

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shut down when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection;

filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532, Condition 5.2.1.]

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532, Condition 5.2.2.]

14.2.4. **Commencement of operation.** The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.

[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. **Proper Maintenance.** At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. **Continued Operation.** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. **Documentation of Need for Improved Monitoring.** After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. **Excursions.** An excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation.

[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

- 14.2.10. **Quality Improvement Plan (QIP).** Based on the results of a determination made under Section 14.2.9.b, the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

- 14.2.11. You must demonstrate continuous compliance with the work practice standards in condition 4.1.8. that apply to you for the equipment listed in condition 14.1.25. according to the methods specified in condition 4.2.3.a.i. through vi. You must conduct a tune-up of the boiler or process heater every 5 years. You may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new source, the first 5-year tune-up must be no later than 61 months after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

[45CSR34; 40 CFR §§63.7540(a)(10), (12), (13), 63.7515(d)]

14.3. Testing Requirements

- 14.3.1. **Opacity Testing.** To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4. Recordkeeping Requirements

- 14.4.1. Records, Operation and Compliance.

- a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and

chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

- b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.
- c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.
- d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.
- e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.
- f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.
- g. To demonstrate compliance with Section 14.1.23. and 14.1.24., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.
- h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

- 14.4.2. **Equipment Maintenance Records.** The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.3. **Certification of Information.** Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 14.1.3., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

- 14.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 14.1.3., the permittee shall maintain records of the occurrence and duration of any

malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

- 14.4.6. **Opacity Records.** The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

- 14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

- 14.4.8. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

- 14.4.9. **General recordkeeping requirements for CAM:**

- a. The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of

monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[45CSR§30-5.1.c. and 40 C.F.R. §64.9 (b)]

14.5. Reporting Requirements

- 14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

- 14.5.2. **General reporting requirements for CAM.** A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9(a)(2)]

- 14.5.3. You must submit reports in accordance with condition 4.5.3.

[45CSR34, 40 CFR §§ 63.7550(b), (c)(1), (5)(i) through (iii), (xiv), and (xvii), (h)(3)]

14.6. Compliance Plan

- 14.6.1. None.

Appendix A - 45CSR2 and 45CSR10 Monitoring Plans

Regulation 2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type 'b' sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1	Main Boiler	80.0	$(80.0)(0.09) = 7.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3 \text{ \#/hr}$
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 2 – Applicable Requirements:

1. West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.
 - These two sources are covered under the Title V permit application for this facility.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
2. Main Boiler (B-1) and VIM Boiler (B-4) have inputs of 80.0 MMBTU/Hr and 26.0 MMBTU/Hr respectively.
 - These two sources are covered under the Title V permit application for this facility.
 - Monthly gas usage and gas sulfur content records are kept for both of these sources.
 - Start-up and shut-down records are kept for both of these sources.
 - These two sources burn natural gas only and as a result are not required to have method 9 opacity monitoring per requirements of Regulation 2.

Regulation 10 – To Prevent and Control Air Pollution from the emission of Sulfur Oxides:

The Huntington Plant has four indirect fired natural gas combustion sources. Two of these four sources are boilers and two are process heaters (Kolene Salt Baths). These sources only burn natural gas and are Regulation 2 - Type 'b' sources.

Process ID #	Description	MMBTU/HR	Allowable Rate
B – 1	Main Boiler	80.0	$(80.0)(0.09) = 7.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0)(0.09) = 2.3 \text{ \#/hr}$
CD – 32	West Pickle Salt Bath	7.2	Not Applicable
SM – 5,6,7	CAP-Line Salt Bath	2.7	Not Applicable

Regulation 10 – Applicable Requirements:

1. West Pickle Salt Bath (CD-32) and CAP-Line Salt Bath (SM-5,6,7) have a heat input of less than 10 MMBTU/HR.

- These two sources are covered under the Title V permit application for this facility.

- These two sources are exempt from the provisions of Regulation 10 and 10A due to a MMBTU/Hr burner rating of less than 10MMBTU/Hr. These two sources burn natural gas only and do not burn a process gas that contains hydrogen sulfide.

2. Main Boiler (B-1) and VIM Boiler (B-4) have inputs of 80.0 MMBTU/Hr and 26.0 MMBTU/Hr respectively.

- These two sources are covered under the Title V permit application for this facility.

- These two sources are exempt from Regulation 10 and 10A due to combustion of natural gas only and do not burn a process gas that contains hydrogen sulfide. Monthly gas usage and gas sulfur content records are kept for both of these sources.

- Exempt from Regulation 10, section 8 testing, monitoring, recordkeeping and reporting requirements due to the combustion of natural gas only in both of these sources.

Manufacturing Process Sources - Regulation 10 Applicability

**Direct Combustion Sources – Direct Natural Gas Fired Processes
 Regulation 10 - Allowable Fuel Burning, SO₂ Stack Emission Rates**

	Huntington Alloys – Products of Natural Gas Combustion Description	Tons per Year - Potential to Emit – SO ₂ HA-SCM Emission Point #	Capacity GAS MMBTU/hr	SO ₂ ** Allowable lbs/hour	PTE Sulfur Max PPM Nat. Gas	PTE SO ₂ Ton/Year	PTE SO ₂ Pound/Yr	PTE SO ₂ Pound/Hr
Direct Fired Sources	F-11 Reheat Fce	PM-9A	26.7	82.8	<10.0 PPM	0.053	107	0.012
	F-12- Reheat Fce	PM-9B	26.7	82.8	<10.0 PPM	0.053	107	0.012
	F-21 Forge Fce	PM-10A	8.9	27.6	<10.0 PPM	0.018	36	0.004
	F-22 Forge Fce	PM-10B	8.9	27.6	<10.0 PPM	0.018	36	0.004
	F-3 Farge Fce	PM-11	112.0	347.2	<10.0 PPM	0.224	448	0.051
	F-41 Ingot Fce	PM-12A	14.4	44.6	<10.0 PPM	0.029	58	0.007
	F-42 Ingot Fce	PM-12B	14.4	44.6	<10.0 PPM	0.029	58	0.007
	F-5 Ingot Fce	PM-13	60.0	186.0	<10.0 PPM	0.120	240	0.027
	F-6 Ingot Fce	PM-14	52.8	163.7	<10.0 PPM	0.106	211	0.024
	F-7 Ingot Fce	PM-15	52.8	163.7	<10.0 PPM	0.106	211	0.024
	F-8 Ingot Fce	PM-16	52.8	163.7	<10.0 PPM	0.106	211	0.024
	F-91 Ingot Fce	PM-17A	14.3	44.3	<10.0 PPM	0.029	57	0.007
	F-92 Ingot Fce	PM-17B	14.3	44.3	<10.0 PPM	0.029	57	0.007
	#1 CB Fce	PM-18	84.8	262.9	<10.0 PPM	0.170	339	0.039
	#2 CB Fce	PM-19	20.8	64.5	<10.0 PPM	0.042	83	0.010
	E Steckel Reheat	PM-21	19.3	59.8	<10.0 PPM	0.039	77	0.009
	W Steckel Reheat	PM-22	19.3	59.8	<10.0 PPM	0.039	77	0.009
	F-101 Forge Fce	PM-28	13.6	42.2	<10.0 PPM	0.027	54	0.006
	F-102 Forge Fce	PM-29	13.6	42.2	<10.0 PPM	0.027	54	0.006
	Tank #59 Dryer	CD-15	1.0	3.1	<10.0 PPM	0.002	4	0.000
	Drying Tank #2	CD-18	1.0	3.1	<10.0 PPM	0.002	4	0.000
	Drying Tank #3	CD-19	2.0	6.2	<10.0 PPM	0.004	8	0.001
	#2 CAF Fce	CD-20	7.0	21.7	<10.0 PPM	0.014	28	0.003
	#3 CAF Fce	CD-21	7.5	23.3	<10.0 PPM	0.015	30	0.003
	#4 CAF Fce	CD-22	6.1	18.9	<10.0 PPM	0.012	24	0.003
	#10A Fce	CD-24 (NO)	3.0	9.3	<10.0 PPM	0.006	12	0.001
	Squeeze Point	CD-25	0.5	1.6	<10.0 PPM	0.001	2	0.000
	CAP Fces	SM-9	49.5	153.5	<10.0 PPM	0.099	198	0.023
	BAL Drier	SM-11	1.0	3.1	<10.0 PPM	0.002	4	0.000
	23" Mill Fce #1	BW-1A	40.0	124.0	<10.0 PPM	0.080	160	0.018
	23" Mill Fce #2	BW-1B	40.0	124.0	<10.0 PPM	0.080	160	0.018
	Walking Beam Fce	BW-2	30.0	93.0	<10.0 PPM	0.060	120	0.014
	MS E. Ladle Rht	MS-4A	2.0	6.2	<10.0 PPM	0.004	8	0.001
	MS W. Ladle Rht	MS-4B	1.0	3.1	<10.0 PPM	0.002	4	0.000
	New W. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002
	New E. Ladle Rht	MS-	4.0	12.4	<10.0 PPM	0.008	16	0.002
	AOD Vessel Rht	MS-7	10.0	30.8	<10.0 PPM	0.020	40	0.005
	Rotary Hearth	AR-1 (NO)	4.0	12.4	<10.0 PPM	0.008	16	0.002
	Tip-Up Fce	PM-24	14.0	43.4	<10.0 PPM	0.028	56	0.006
	Stress Relief Fce	VM-1	4.5	14.0	<10.0 PPM	0.009	18	0.002
Mold Preheat	VM-2	6.0	18.6	<10.0 PPM	0.012	24	0.003	
VIM Drying Oven	VM-3	1.4	4.3	<10.0 PPM	0.003	6	0.001	
VIM Ladle Preheat	VM-4	1.8	5.6	<10.0 PPM	0.004	7	0.001	
VIM Fce Shell Htr	VM-	1.5	4.7	<10.0 PPM	0.003	6	0.001	
Rod Heat Treat	MA-4	13.8	42.8	<10.0 PPM	0.028	55	0.006	
Plate Anneal Fce	PM-23	25.0	77.5	<10.0 PPM	0.050	100	0.011	

Indirect Fired Sources	Main Boiler	B-1	80.0	248.0	<10.0 PPM	0.160	320	0.037
	VIM Boiler	B-4	26.0	80.6	<10.0 PPM	0.052	104	0.012
	WP Salt Bath	CD-32	7.2	22.3	<10.0 PPM	0.014	29	0.003
	CAP Salt Bath	SM-5,6,7	2.7	8.4	<10.0 PPM	0.005	11	0.001

** = MMBTU/HR X 3.1 per Regulation 10

PTE – Based on 8,760 hours of operation

(NO) = Not Operational

Manufacturing Process Sources - Regulation 10 Applicability

**Huntington Plant Melting Department – Electric Arc Furnaces and Argon Oxygen Decarburization Vessel
 Applicability Determination and Compliance Monitoring Method**

•These sources are covered under the Title V permit application for this facility.

•Due to the fact that these sources have the potential to emit Sulfur dioxide in amounts that exceed 500 pounds per year, a monitoring plan, as required by regulation 10 and 10A, has been instituted for these sources. The monitoring plan will identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured by the Huntington Plant analytical laboratory in total percent sulfur by weight. This number will then be directly converted to an estimated maximum monthly concentration of sulfur dioxide emitted from the dust collector. The chart below details the format of the monthly report.

**Huntington Alloys – Huntington Plant
 Regulation 10 – Sulfur Dioxide Monitoring
 Electric Arc Furnace – AOD Melting Department**

Month/Year: _____

Month	Highest Monthly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum monthly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
January			2,000
February			2,000
March			2,000
April			2,000
May			2,000
June			2,000
July			2,000
August			2,000
September			2,000
October			2,000
November			2,000
December			2,000

- Note:
- (1) This value represents the highest melt/heat sulfur content observed during this reporting month from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
 - (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
 - (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant Cold Drawing Department – West & East Pickle House – Sulfuric Acid Pickling Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- Stack testing of Sulfuric Acid pickling processes has shown that they do not produce sulfur dioxide air emissions as a result of operations. Sulfuric Acid Pickling produces sulfuric acid (H₂SO₄) mist emissions that are not covered by Regulation 10. These sources are in compliance with the WV Office of Air Quality limitations for sulfuric acid mist emissions under Regulation 7.

Manufacturing Process Sources - Regulation 10 Applicability

Huntington Plant - All other production processes not previously listed Applicability Determination and Compliance Monitoring Method

- These sources are covered under the Title V permit application for this facility.
- No other sources, other than those previously listed, have the capability of producing Sulfur Dioxide air emissions at the Huntington Facility.

Regulation 10 – Sulfur Dioxide Monitoring Electric Arc Furnace – AOD Melting Department

Quarter:	Year:
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Quarter	Highest Quarterly Heat Sulfur Percentage Melt Shop EAF's ⁽¹⁾	Equivalent maximum quarterly SO ₂ Emissions as discharged from baghouse Parts per Million ⁽²⁾	Maximum Allowable SO ₂ Emissions as allowed by Regulation 10 Parts per Million ⁽³⁾
01-01-01 to 03-31-01			2,000
04-01-01 to 06-30-01			2,000
07-01-01 to 09-30-01			2,000
10-01-01 to 12-31-01			2,000

Notes:

- (1) This value represents the highest melt/heat sulfur content observed during this reporting quarter from the Electric Arc Furnaces as reported by the Huntington Plant Spectrographic Laboratory.
- (2) This value represents an estimation of the parts per million of SO₂ that is produced by the melting process and released from the baghouse. This value assumes that all of the sulfur within a heat is converted directly into sulfur dioxide. In actuality, the overwhelming majority of the sulfur within a heat is absorbed into the slag as CaS.
- (3) Regulation 10 limit for sulfur dioxide emissions from manufacturing operations.

The CERTIFICATION OF DATA ACCURACY statement must be completed within thirty (30) days of the end of the reporting period.

This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available upon request to the Chief or his (her) authorized representative.

I certify that, based on information and belief formed after reasonable inquiry, the statement and information contained in this quarterly report are true and accurate.

Signature:	Vice President & General Manager	
Responsible Official	Title	Date:

Fact Sheet



For Draft Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-01100007-2023**
Application Received: **May 25, 2023**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive, Huntington, WV 25705**

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 379.2 km Easting • 4252.30 km Northing • Zone 17
Directions: Interstate 64W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately 120 different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions		2021 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Carbon Monoxide (CO)	182.6	267.9	41.58
Nitrogen Oxides (NO _x)	636.9	314.6	45.23
Particulate Matter (PM _{2.5})	1093.9	130.9	11.59
Particulate Matter (PM ₁₀)	1093.9	130.9	30.80
Total Particulate Matter (TSP)	1278.4	130.9	16.81
Sulfur Dioxide (SO ₂)	8.92	8.92	0.29
Volatile Organic Compounds (VOC)	53.9	51.0	3.77

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions		2021 Actual Emissions
	2018 Fact Sheet	2023 App. pg 11	
Nickel (Ni)	190.8	27.2	7.11
Chromium (Cr)	56.0	7.6	2.31
Hydrochloric Acid (HCl)	20.0	3.9	1.10
Hexane (C ₆ H ₁₄)	5.8	5.8	0

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 182.6 tons per year of CO, 636.9 tons per year of NO_x, 1093.9 tons per year of PM₁₀, 190.8 tons per year of nickel, 56.0 tons per year of chromium, and 20.0 tons per year of hydrochloric acid. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloy Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR2 PM limits on boilers

	45CSR6	Open burning prohibited.
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	HAP Emission Standards for Part 63 Sources
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 CFR 63 subpart N	Chromium Electroplating MACT
	40 CFR 63 subpart DDDDD	Boiler and Process Heater MACT
	40 CFR 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR§21-30	VOC limits

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0137	March 24, 1975	
R13-1165	November 3, 1989	
R13-1646A	March 5, 2015	
R13-1767	October 17, 1994	
R13-2163A	December 20, 2010	
R13-2532I	February 25, 2016	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a fourth renewal of the Title V Permit. The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes:

- **Condition 2.1.3.** – This condition was updated to delete the word “such” which was removed from 45CSR30 effective March 31, 2023. The reference was changed from 45CSR§30-2.12 to 45CSR§30-2.39. because the definition of “Secretary” was renumbered in a previous version of 45CSR30.
- **Condition 2.11.4.** - The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.
- **Conditions 2.17., 3.5.7. and 3.5.8.a.1.** – These conditions were deleted and replaced with “Reserved” because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it was repealed.
- **Condition 3.5.3.** - The US EPA contact information and address were updated.
- **Condition 3.5.4.** – This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- **Condition 3.5.8.a.2.** – This condition was updated to replace the word “telefax” with “email” according to the change in 45CSR30 effective March 31, 2023.

Updated Permit Language Due to Rule/Regulation Language Changes:

- Condition 4.1.8.b. – This condition was amended to match updated 40 CFR 63 Subpart N. In the last sentence of the paragraph, the word “Tables” was added to the phrase “Tables 11 through 13” and then 13 was changed to 15.

Updated Permit Language to Correct Typographical Errors:

- Condition 4.5.3.c. – In the first sentence, a typo was corrected by changing “subpart DDDD” to “subpart DDDDD.”
- Condition 6.1.4. – In the first sentence, a typo was corrected by changing “0.025 lbm/hr” to “0.025 lb/hr.”

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.
- b. 40 CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).
- c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of

- the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).
- d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151 m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR§ 60.110b(b).
 - e. 40 CFR Part 60, Subparts AA and AAa - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and Argon Oxygen Reactor were installed in 1966, 1971, and 1971 respectively, before the applicability dates of these regulations (after October 21, 1974). Therefore, these regulations are not applicable to the facility.
 - f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities that pickle specialty steel. Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.
 - g. 40 CFR Part 63, Subpart YYYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

Point of Contact

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Read: WV DAQ Title V Permit Renewal Application Complete for Huntington Alloys Corporation's Huntington WV Facility

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "daniel.p.roberts@wv.gov" <daniel.p.roberts@wv.gov>

Tue, Jul 25, 2023 at 6:26 PM

Your message

To: Felty, Roger
Subject: WV DAQ Title V Permit Renewal Application Complete for Huntington Alloys Corporation's Huntington WV Facility
Sent: Tuesday, July 25, 2023 3:32:31 PM (UTC-07:00) Mountain Time (US & Canada)

was read on Tuesday, July 25, 2023 4:26:32 PM (UTC-07:00) Mountain Time (US & Canada).



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Read: WV DAQ Title V Permit Renewal Application Complete for Huntington Alloys Corporation's Huntington WV Facility

1 message

Bell, Thomas <Tom.Bell@specialmetals.com>
To: "daniel.p.roberts@wv.gov" <daniel.p.roberts@wv.gov>

Tue, Jul 25, 2023 at 5:35 PM

Your message

To: Bell, Thomas
Subject: [EXTERNAL] WV DAQ Title V Permit Renewal Application Complete for Huntington Alloys Corporation's Huntington WV Facility
Sent: Tuesday, July 25, 2023 5:32:31 PM (UTC-05:00) Eastern Time (US & Canada)

was read on Tuesday, July 25, 2023 5:34:37 PM (UTC-05:00) Eastern Time (US & Canada).



Roberts, Daniel P <daniel.p.roberts@wv.gov>

WV DAQ Title V Permit Renewal Application Complete for Huntington Alloys Corporation's Huntington WV Facility

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>

Tue, Jul 25, 2023 at 5:32 PM

To: jkhetani@precastcorp.com

Cc: tom.bell@specialmetals.com, "Feltly, Roger" <roger.feltly@arcadis.com>, "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>

RE: Application Status: Complete
Huntington Alloys Corporation
Huntington WV Facility
Permit Renewal Application R30-01100007-2023

Mr. Khetani,

Your Title V renewal application for a permit to operate the above referenced facility was received by this Division on May 25, 2023. After review of said application, it has been determined that the application is administratively complete as submitted. Therefore, the above referenced facility qualifies for an Application Shield.

The applicant has the duty to supplement or correct the application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

The submittal of a complete application shall not affect the requirement that any source have all **preconstruction permits** required under the rules of the Division.

If during the processing of this application it is determined that additional information is necessary to evaluate or take final action on this application, a request for such information will be made in writing with a reasonable deadline for a response. Until which time as your renewal permit is issued or denied, please continue to operate this facility in accordance with 45CSR30, section 6.3.c. which states: *If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.* This protection shall cease to apply if, subsequent to the completeness determination made pursuant to paragraph 6.1.d. of 45CSR30 and as required by paragraph 4.1.b., the applicant fails to submit by the deadline specified in writing any additional information identified as being needed to process the application.

Please remember, **failure of the applicant to timely submit information required or requested to process the application may cause the Application Shield to be revoked.** Should you have any questions regarding this determination, please call me at (304)926-0499 ext. 41902.

Sincerely,

Daniel P. Roberts

WV Department of Environmental Protection

Division of Air Quality

(304) 926-0499 ext. 41902

Daniel.p.roberts@wv.gov



Roberts, Daniel P <daniel.p.roberts@wv.gov>

WV DAQ Title V Permit Application Status for Huntington Alloys Corporation; Huntington

1 message

Mink, Stephanie R <stephanie.r.mink@wv.gov> Tue, May 30, 2023 at 1:24 PM
To: jkhetani@precastcorp.com, tom.bell@specialmetals.com, roger.felty@arcadis.com
Cc: Carrie McCumbers <carrie.mccumbers@wv.gov>, Daniel P Roberts <daniel.p.roberts@wv.gov>

RE: Application Status
Huntington Alloys Corporation
Huntington
Facility ID No. 011-00007
Application No. R30-01100007-2023

Dear Mr. Khetani,

Your application for a Title V Permit Renewal for Huntington Alloys Corporation’s Huntington facility was received by this Division on May 25, 2023, and was assigned to Dan Roberts

Should you have any questions, please contact the assigned permit writer, Dan Roberts , at 304-926-0499, extension 41902, or Daniel.P.Roberts@wv.gov.

--

Stephanie Mink

Environmental Resources Associate
West Virginia Department of Environmental Protection
Division of Air Quality, Title V Permitting
[601 57th Street SE](#)
Charleston, WV 25304
Phone: 304-926-0499 x41281



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Huntington Alloys application

1 message

Mink, Stephanie R <stephanie.r.mink@wv.gov>

Tue, May 30, 2023 at 1:14 PM

To: Daniel P Roberts <daniel.p.roberts@wv.gov>

Hi Dan,

I'm finally getting to enter Huntington Alloys, here's a dated copy of the application. The email to the company will go out shortly.

Enjoy the rest of your day!

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

 **R30-01100007-2023 Huntington Alloys Renewal App.pdf**
8024K

Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

• Type of NSR Application (check all that apply):

- Construction
- Modification
- Class I Administrative Update
- Class II Administrative Update
- Relocation
- Temporary
- Permit Determination

• Type of 45CSR30 (TITLE V) Application:

- Title V Initial
- Title V Renewal
- Administrative Amendment**
- Minor Modification**
- Significant Modification**
- Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENTS to the combined NSR/Title V application.**

• Payment Type:

- Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

• If the permit writer has any questions, please contact (all that apply):

Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

Company Contact

- Name:
- Email:
- Phone Number:

Consultant

- Name:
- Email:
- Phone Number:



3200 Riverside Dr.

Huntington, WV 25705-1771 U.S.A.
(304) 526-5228 Fax:(304) 526-5437
www.specialmetals.com

Tom Bell
Environmental Manager

May 25, 2023

Laura Crowder
Director
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Dear Ms. Crowder,

Please find enclosed the Huntington Alloys Corporation Title V renewal application. The renewal has been completed per the renewal application requirements under section 4.3 of 45CSR30.

If you should have any questions or require further information please do not hesitate to contact me at (304) 526-5259.

Sincerely,

A handwritten signature in blue ink that reads "Tom Bell". The signature is fluid and cursive, with the first and last names clearly legible.

Tom Bell
Environmental Manger

Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

• DAQ Facility ID (for existing facilities only):

• Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

• Type of NSR Application (check all that apply):

- Construction
- Modification
- Class I Administrative Update
- Class II Administrative Update
- Relocation
- Temporary
- Permit Determination

• Type of 45CSR30 (TITLE V) Application:

- Title V Initial
- Title V Renewal
- Administrative Amendment**
- Minor Modification**
- Significant Modification**
- Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

• Payment Type:

- Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

• If the permit writer has any questions, please contact (all that apply):

Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

Company Contact

- Name:
- Email:
- Phone Number:

Consultant

- Name:
- Email:
- Phone Number:



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 numbered sections: 1. Name of Applicant, 2. Facility Name or Location, 3. DAQ Plant ID No., 4. Federal Employer ID No. (FEIN), 5. Permit Application Type, 6. Type of Business Entity, 7. Is the Applicant the..., 8. Number of onsite employees, 9. Governmental Code, 10. Business Confidentiality Claims.

11. Mailing Address		
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: (304) 526-5100	Fax Number:	

12. Facility Location (Physical Address)		
Street: 3200 Riverside Drive	City: Huntington	County: Cabell
UTM Easting: 379.20 km	UTM Northing: 4,252.30 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions:		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Ohio Kentucky	
Is facility located within 100 km of a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Jay Khetani		Title: General Manager
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: 304-526-5100	Cell Number:	
E-mail address: jkhetani@precastcorp.com		
Environmental Contact: Tom Bell		Title: Environmental Manager
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: 304-526-5228	Cell Number:	
E-mail address: tom.bell@specialmetals.com		
Application Preparer: Roger Felty		Title: Principal Air Quality Consultant
Company: Arcadis U.S., Inc.		
Street or P.O. Box: 630 Plaza Drive, Suite 200		
City: Highlands Ranch	State: CO	Zip: 80129
Telephone Number: 720-409-0288	Cell Number:	
E-mail address: roger.felty@arcadis.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Huntington Alloys Corp. is a nickel manufacturing facility. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty (120) different alloys.	Huntington Alloys Corp. melting facilities and rolling mills are devoted exclusively to the production of wrought nickel and high nickel alloy products.	33149	3356

Provide a general description of operations.

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> Cross-State Air Pollution Rule (45CSR43)	

19. Non Applicability Determinations
<p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>40CFR Part 60 subpart Dc - New Source Performance Standards (NSPS) for Small Industrial Steam Generating Units. The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 MMBtu/hr.</p> <p>40CFR Part 60 subpart K - New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).</p>
<p><input checked="" type="checkbox"/> Permit Shield</p>

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

40 CFR 60 Subpart Ka - New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).

40 CFR 60 Subpart Kb - New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR§ 60.110b(b).

40 CFR Part 60 Subparts AA and AAa - New Source Performance Standards (NSPS) for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983. The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and AOR vessel were installed in 1966, 1971, and 1971 respectively, before the applicability date of this regulation (October 21, 1974). Therefore, this regulation is not applicable to the facility.

40 CFR Part 63 - Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling- HCl Process Facilities and Hydrochloric Acid Regeneration Plants. This standard is not applicable to facilities that pickle specialty steel. Specialty Steel means a category of steel that includes silicon electrical, alloy and stainless steels.

40 CFR Part 63 – Subpart YYYYYY – National Emission Standard for Hazardous Air Pollutants for Area/Sources: Electric Arc Furnace Steelmaking Facilities. This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Open burning [45CSR§6-3.1.]

Open burning exemptions [45CSR§6-3.2.]

Asbestos [40 CFR 61 and 45CSR34]

Odor [45CSR§4-3.1 State-Enforceable only.]

Standby plan for reducing emissions [45CSR§11-5.2]

Emission inventory [W.Va. Code § 22-5-4(a)(14)]

Ozone-depleting substances [40 C.F.R. 82, Subpart F]

Risk Management Plan [40 C.F.R. 68]

Fugitive Particulate [45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]



Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Odors. For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. [45CSR§30-5.1.c. State-Enforceable only.]

Fugitives. The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.[45CSR§30-5.1.c.]

Fugitives. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.[45CSR§30-5.1.c.]

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

21. Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-0137	03/24/1975	
R13-1165	11/03/1989	
R13-1646A	03/05/2015	
R13-1767	10/17/1994	
R13-2163A	12/20/2010	
R13-2532I	02/25/2016	

22. Inactive Permits/Obsolete Permit Conditions

Permit Number	Date of Issuance MM/DD/YYYY	Permit Condition Number

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	267.9
Nitrogen Oxides (NO _x)	314.6
Lead (Pb)	
Particulate Matter (PM _{2.5}) ¹	
Particulate Matter (PM ₁₀) ¹	130.9
Total Particulate Matter (TSP)	130.9
Sulfur Dioxide (SO ₂)	8.92
Volatile Organic Compounds (VOC)	51.0
Hazardous Air Pollutants ²	Potential Emissions
Nickel	27.2
Chromium	7.6
Hydrochloric Acid	3.9
Hexane	5.8
Regulated Pollutants other than Criteria and HAP	Potential Emissions

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input checked="" type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input checked="" type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input checked="" type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input checked="" type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input checked="" type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input checked="" type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

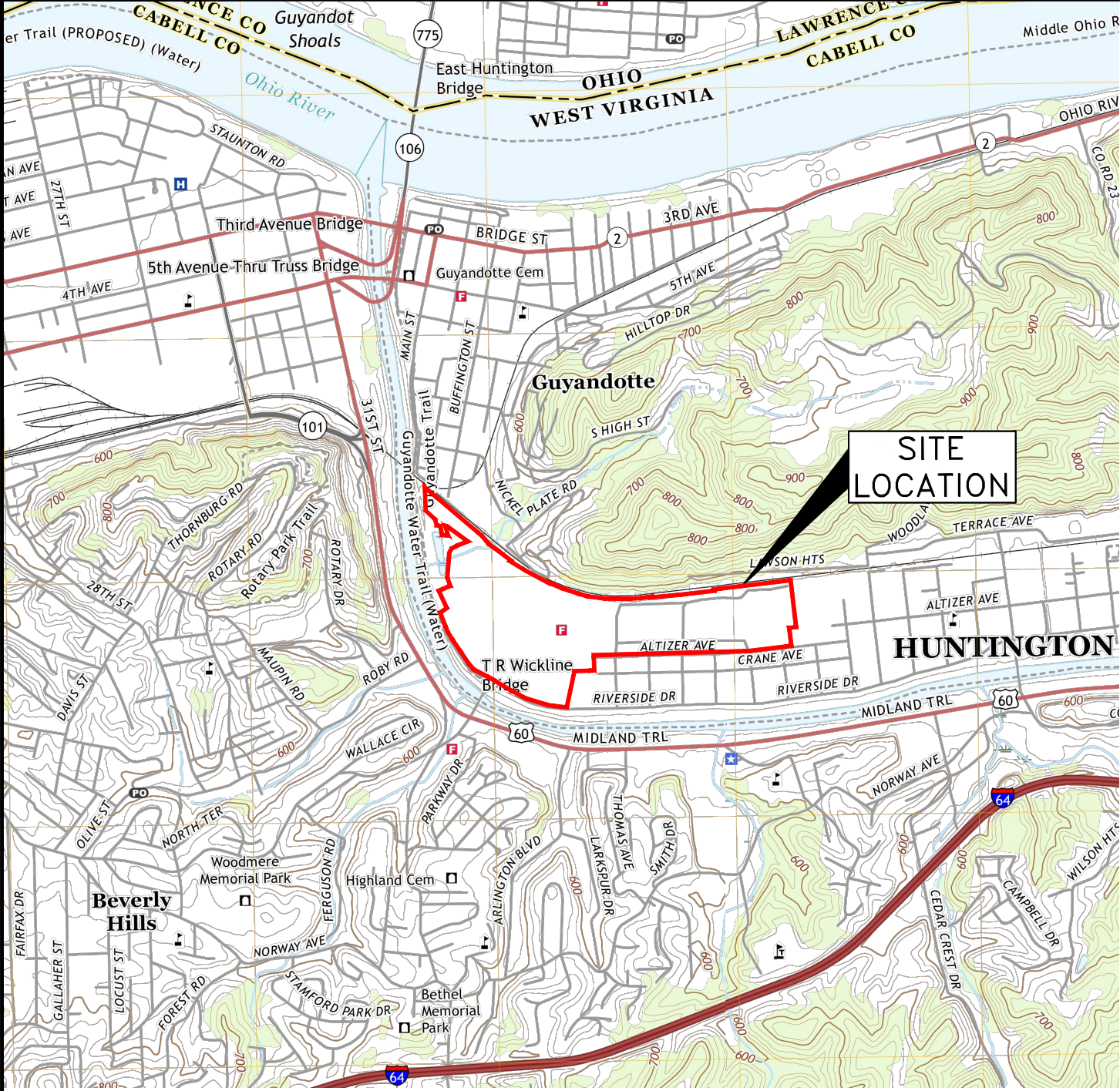
28. Certification of Truth, Accuracy and Completeness and Certification of Compliance	
<i>Note: This Certification must be signed by a responsible official as defined in 45CSR§30-2.38.</i>	
a. Certification of Truth, Accuracy and Completeness	
I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.	
b. Compliance Certification	
Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.	
Responsible official (type or print)	
Name: Jay Khetani	Title: General Manager
Responsible official's signature:	
Signature: 	Signature Date: 5/25/23 (Must be signed and dated in blue ink or have a valid electronic signature)

Note: Please check all applicable attachments included with this permit application:	
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

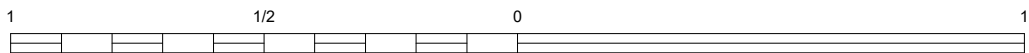
Attachment A
Area Map

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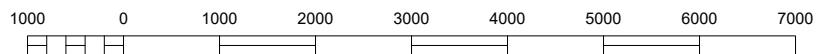


**SITE
LOCATION**

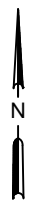
SCALE 1:24 000



SCALE IN MILE



SCALE IN FEET



WEST VIRGINIA

HUNTINGTON ALLOYS CORPORATION
3200 RIVERSIDE DRIVE, HUNTINGTON, WEST VIRGINIA

SITE LOCATION MAP



FIGURE
1

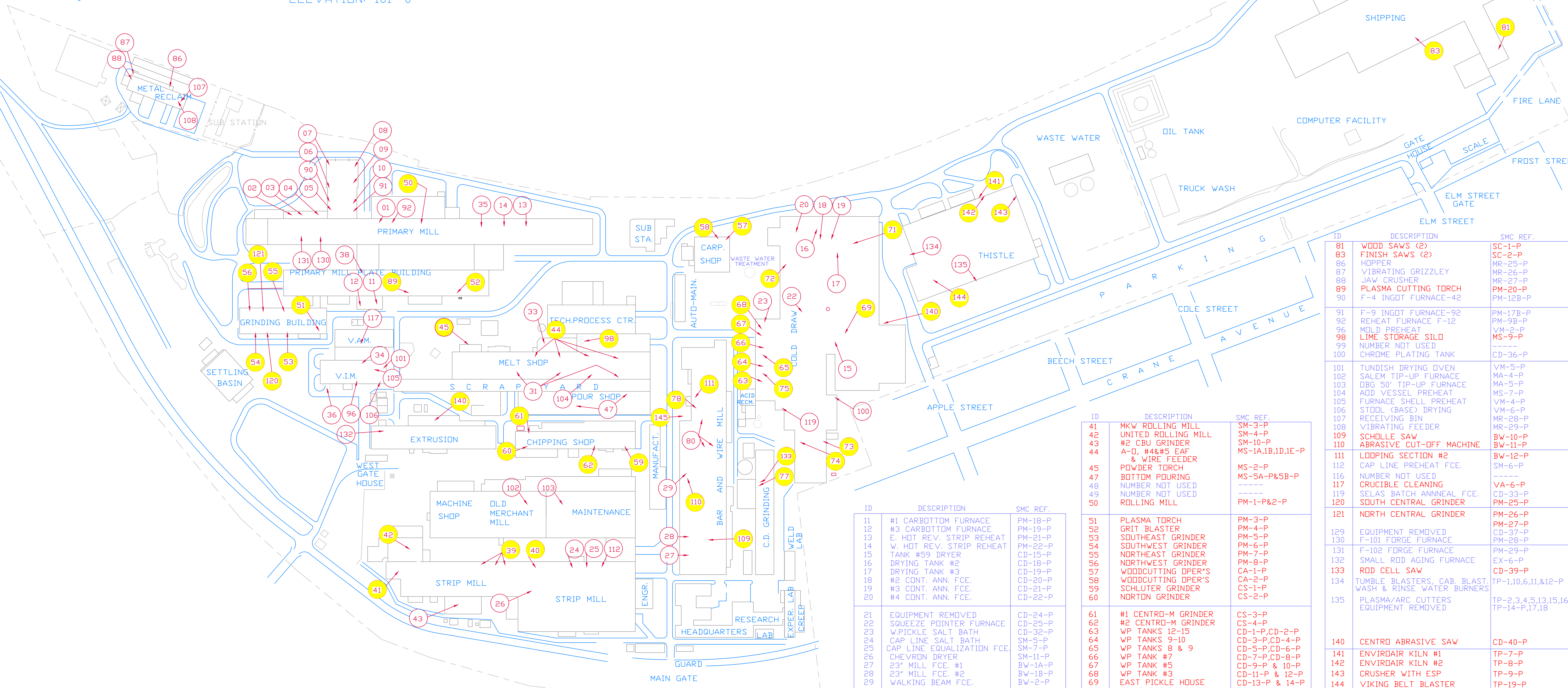
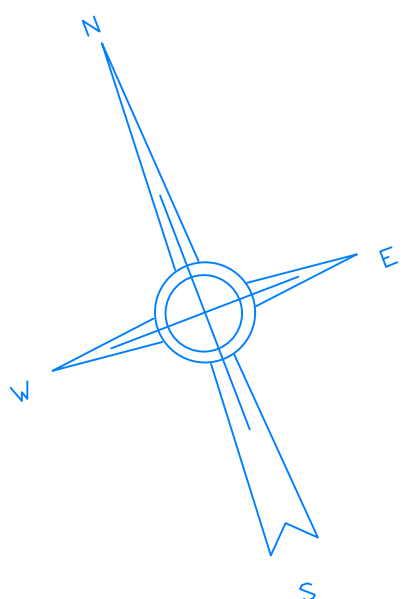
REFERENCE: USGS 7.5 MINUTE QUADRANGLE; HUNTINGTON, WEST VIRGINIA-OHIO 2019.

Attachment B

Plot Plan

SPECIAL METALS CORPORATION

HUNTINGTON, WEST VIRGINIA, 25705
 LONGITUDE: 82°23'03" WEST
 LATITUDE: 38°24'45" NORTH
 ELEVATION: 101'-0"



PLANT EMISSION SOURCES - HUNTINGTON PLANT

SCALE 1/16" = 10 FT.

HIGHLIGHTED SOURCES ARE TITLE V VISUAL EMISSION CHECKS

ID	DESCRIPTION	SMC REF.
01	REHEAT FURNACE F-11	PM-9A-P
02	F-2 FORGE FCE 21	PM-10A-P
03	F-3 FORGE FCE 22	PM-10B-P
04	F-3 FORGE FURNACE	PM-11-P
05	F-4 INGOT FURNACE-41	PM-12A-P
06	F-5 INGOT FURNACE	PM-13-P
07	F-6 INGOT FURNACE	PM-14-P
08	F-7 INGOT FURNACE	PM-15-P
09	F-8 INGOT FURNACE	PM-16-P
10	F-9 INGOT FURNACE-91	PM-17A-P

ID	DESCRIPTION	SMC REF.
11	#1 CARBOTTOM FURNACE	PM-18-P
12	#3 CARBOTTOM FURNACE	PM-19-P
13	E. HOT REV. STRIP REHEAT	PM-21-P
14	W. HOT REV. STRIP REHEAT	PM-22-P
15	TANK #59 DRYER	CD-15-P
16	DRYING TANK #2	CD-18-P
17	DRYING TANK #3	CD-19-P
18	#2 CDNT. ANN. FCE.	CD-20-P
19	#3 CDNT. ANN. FCE.	CD-21-P
20	#4 CDNT. ANN. FCE.	CD-22-P

ID	DESCRIPTION	SMC REF.
41	MKW ROLLING MILL	SM-3-P
42	UNITED ROLLING MILL	SM-4-P
43	#2 CBU GRINDER	SM-10-P
44	A-O #4 EAF & WIRE FEEDER	SM-1A,1B,1D,1E-P
45	POWDER TORCH	MS-2-P
47	BOTTOM POURING	MS-5A-P&5B-P
48	NUMBER NOT USED	----
49	NUMBER NOT USED	----
50	ROLLING MILL	PM-1-P&2-P

ID	DESCRIPTION	SMC REF.
51	PLASMA TORCH	PM-3-P
52	GRIT BLASTER	PM-4-P
53	SOUTHWEST GRINDER	PM-5-P
54	SOUTHWEST GRINDER	PM-5-P
55	NORTHEAST GRINDER	PM-7-P
56	NORTHWEST GRINDER	PM-8-P
57	WOODCUTTING OPER'S	CA-1-P
58	WOODCUTTING OPER'S	CA-2-P
59	SCHLUTER GRINDER	CS-1-P
60	NORTON GRINDER	CS-2-P

ID	DESCRIPTION	SMC REF.
81	WOOD SAWS (2)	SC-1-P
83	FINISH SAWS (2)	SC-2-P
86	HOPPER	MR-25-P
87	VIBRATING GRIZZLEY	MR-26-P
88	JAW CRUSHER	MR-27-P
89	PLASMA CUTTING TORCH	PM-20-P
90	F-4 INGOT FURNACE-42	PM-12B-P

ID	DESCRIPTION	SMC REF.
91	F-9 INGOT FURNACE-92	PM-17B-P
92	REHEAT FURNACE F-12	PM-9B-P
96	MOLD PREHEAT	VM-2-P
98	LIME STORAGE SILD	MS-9-P
99	NUMBER NOT USED	----
100	CHROME PLATING TANK	CD-36-P

ID	DESCRIPTION	SMC REF.
101	TUNDISH DRYING OVEN	VM-5-P
102	SALEM TIP-UP FURNACE	MA-4-P
103	DBG 50' TIP-UP FURNACE	MA-5-P
104	ADD VESSEL PREHEAT	MS-7-P
105	FURNACE SHELL PREHEAT	VM-4-P
106	STOOD (BASE) DRYING	VM-6-P
107	RECEIVING BIN	MR-28-P
108	VIBRATING FEEDER	MR-29-P
109	SCHOLLE SAW	BW-10-P
110	ABRASIVE CUT-OFF MACHINE	BW-11-P

ID	DESCRIPTION	SMC REF.
111	LOOPING SECTION #2	BW-12-P
112	CAP LINE PREHEAT FCE.	SM-6-P
116	NUMBER NOT USED	----
117	CRUCIBLE CLEANING	VA-6-P
119	SELAS BATCH ANNEAL FCE.	CD-33-P
120	SOUTH CENTRAL GRINDER	PM-25-P

ID	DESCRIPTION	SMC REF.
121	NORTH CENTRAL GRINDER	PM-26-P
129	EQUIPMENT REMOVED	PM-27-P
130	F-101 FORGE FURNACE	CD-37-P
131	F-102 FORGE FURNACE	PM-29-P
132	SMALL ROD AGING FURNACE	EX-6-P
133	ROD CELL SAW	CD-39-P

ID	DESCRIPTION	SMC REF.
134	TUMBLE BLASTERS, CAB. BLAST. WASH & RINSE WATER BURNERS	TP-1,10,6,11,&12-P
135	PLASMA/ARC CUTTERS	TP-2,3,4,5,13,15,16
	EQUIPMENT REMOVED	TP-14-P,17,18

ID	DESCRIPTION	SMC REF.
140	CENTRO ABRASIVE SAW	CD-40-P
141	ENVIROAIR KILN #1	TP-7-P
142	ENVIROAIR KILN #2	TP-8-P
143	CRUSHER WITH ESP	TP-9-P
144	VIKING BELT BLASTER	TP-19-P
145	BOILER	B-1A-P

ID	DESCRIPTION	SMC REF.
71	EAST CUTTERS (3 SAWS)	CD-17-P
72	WEST CUTTERS (3 SAWS)	CD-23-P
73	MCKAY TUBE RED. SAW	CD-26-P
74	WEAN TUBE RED. SAW	CD-28-P
75	WP TANK #11	CD-38-P
76	NUMBER NOT USED	----
77	GRIND BUILDING SAW	CD-31-P
78	LOOPING SECT. 1	BW-3-P
80	22,23,&CC	BW-7-P,8-P&9-P

PART	DESCRIPTION	REQ'D	MATERIAL	CODE No.	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	REFERENCE DRAWINGS	A/C No.
	I					ADDED ID 140	DAH	9/10	BCB			D	ADDED SMALL ROD AGING FCE #132	CJB	9/07	CEP								
	H					ADDED THISTLE POINTS	JDC	7/10	BCB			C	HIGHLIGHT VISUAL EMISSIONS	JRH	11/03	DAH								
	L				JDM	6/15						G	GENERAL REVISION	JRH	4/09	CEP								
	K				DAH	10/14	SAFETY					F	GENERAL REVISION	JRH	5/08	CEP								
	J				RAR	1/11						E	GENERAL REVISION	JRH	3-08	CEP								
												A	ADDED I.D. #130 & #131.	PCH	5/97									

DATE 9-05-96
 SCALE 1/16" = 10'
 DRAWN PCH
 CHK'D ANSELL
 APP'VD
 P.R. No.
 A/C No.

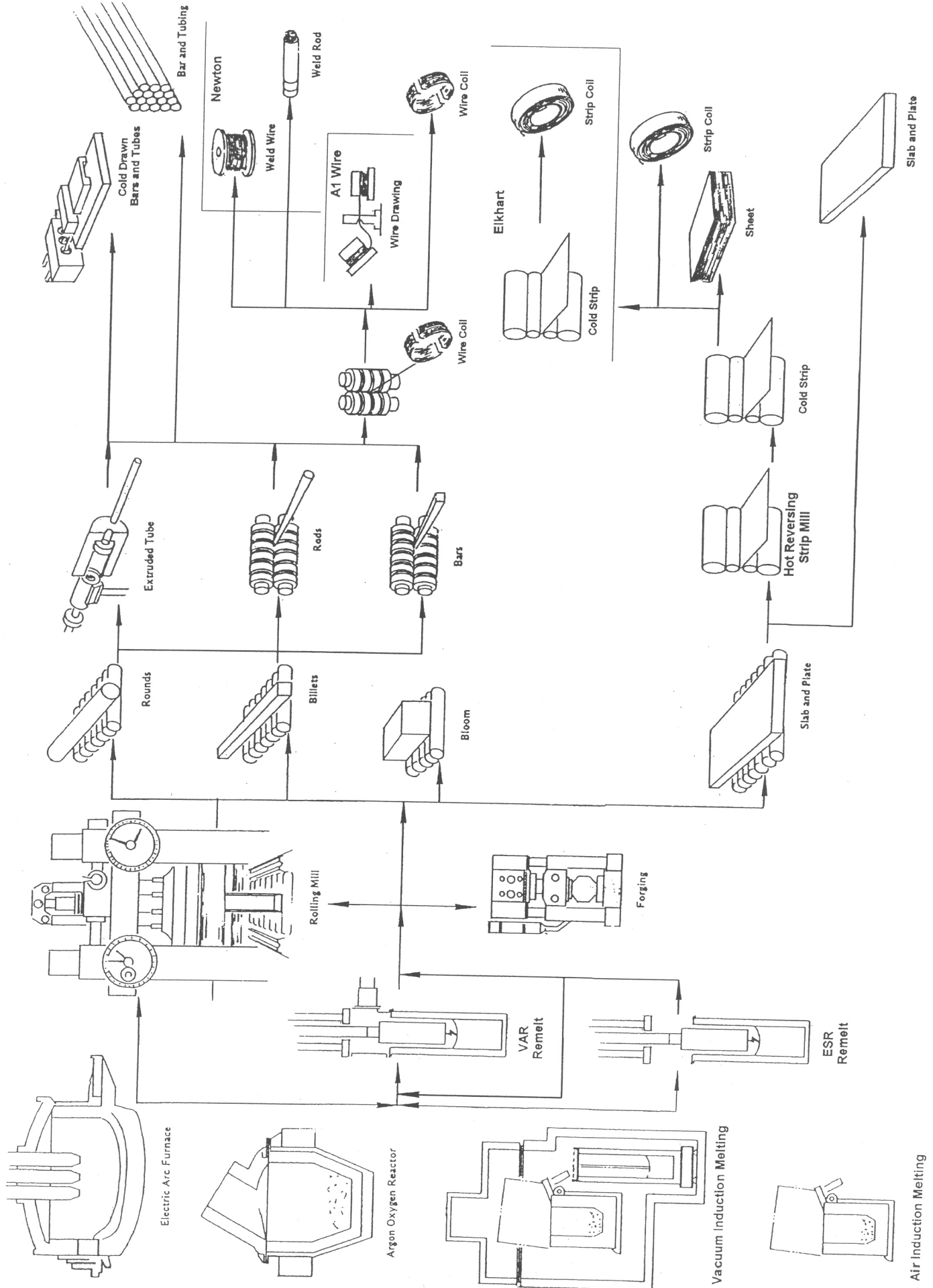
SPECIAL METALS CORPORATION
 3200 Riverside Drive
 Huntington, WV 25705-1771

EMISSION SOURCES- HUNTINGTON PLANT
 POINT I.D. NUMBERS
 ENVIRONMENTAL CONTROL

EQUIP. No. XXX
D-27819

Attachment C
Process Flow Diagram

HBE Production Process Routes



Attachment D
Title V Equipment Table

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Melt Shop					
B-1a-P	B-1a-S	Boiler	2019	33.5 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B	MS-1-S1 & MS-1-S2	#5 Electric Arc Furnace	1971	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1A	MS-1-S1 & MS-1-S2	Argon Oxygen Reactor	1971	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1E-P	MS-1-S1 & MS-1-S2	Wire Feeder	2005	70,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr combined with PM-6-P	Baghouse PM-6 & 25-C
PM-6-P	PM-6 & 25-S	Southwest Grinder	1974	see above	Baghouse PM-6 & 25-C
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr combined with PM-8-P	Baghouses PM-8A-C, PM-8-B-C & PM26-C
PM-8-P	PM-8 & 26-S	Northwest Grinder	1966	see above	Baghouses PM-8A-C, PM-8-B-C & PM26-C
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device ¹
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C
PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None
PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr combined with BW-12-P	None
BW-12-P	BW-3-S, BW-12-S	Wire Looping Section #2	1971	see above	None
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P,CD-2-P	CD-1-S,CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P,CD-4-P	CD-3-S,CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P,CS-6-P	CD-5-S,CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None
CD-7-P,CD-8-P	CD-7-S,CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P,CD-10-P	CD-9-S,CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P,CD-12-P	CD-11-S,CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P,CD-14-P	CD-13-S,CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5708 lbs/hr	Baghouse/ Cyclone CD-40-C
Carpenter Shop					
CA-1-P,CA-2-P	CA-1-S,CA-2	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
 (includes all emission units at the facility except those designated as
 insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None
TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr / 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

Attachment E
Emission Units

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: B-1a-P	Emission unit name: Boiler	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 Located beside Bar & Wire, used to produce steam for entire facility.

Manufacturer: Victory Energy	Model number: VEO-13964	Serial number: 13964
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Construction date: 2017	Installation date: 2019	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 33.5 MMBtu/hr

Maximum Hourly Throughput: 33.5 MMBtu/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 31,905 SCFH	Type and Btu/hr rating of burners: 33,500,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
 Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	20961.37
Carbon Monoxide (CO)	--	14.66
Nitrogen Oxides (NO _x)	--	17.59
Lead (Pb)	--	0.0001
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	1.34
Total Particulate Matter (TSP)	--	1.34
Sulfur Dioxide (SO ₂)	--	0.10
Volatile Organic Compounds (VOC)	--	0.96
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	4.2E-06
3-Methylchloranthrene	--	3.1E-07
7,12-Dimethylbenz(a)anthracene	--	2.8E-06
Acenaphthene	--	3.1E-07
Acenaphthylene	--	3.1E-07
Anthracene	--	4.2E-07
Benzene	--	3.7E-04
Benzo(a)anthracene	--	3.1E-07
Benzo(a)pyrene	--	2.1E-07
Benzo(b)fluoranthene	--	3.1E-07
Benzo(g,h,i)perylene	--	2.1E-07
Benzo(k)fluoranthene	--	3.1E-07
Chrysene	--	3.1E-07
Dibenzo(a,h)anthracene	--	2.1E-07
Dichlorobenzene	--	2.1E-04
Fluoranthene	--	5.4E-07
Fluorene	--	5.0E-07
Formaldehyde	--	1.3E-02
Hexane	--	3.1E-01
Indenol(1,2,3,c,d)pyrene	--	3.1E-07
Naphthalene	--	1.0E-04
Phenanthrene	--	3.0E-06
Pyrene	--	8.8E-07

Toluene	--	5.9E-04
Arsenic	--	3.5E-05
Beryllium	--	2.1E-06
Cadmium	--	1.9E-04
Chromium	--	2.4E-04
Cobalt	--	1.5E-05
Manganese	--	6.7E-05
Mercury	--	4.6E-05
Nickel	--	3.7E-04
Selenium	--	4.2E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 5.36 pounds per hour for B-1a-P and B-4-P.
[45CSR§2-4.1.b.]

4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2.]

4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 190.4 pounds per hour for B-1a-P and B-4-P.
[45C SR§10-3.3.f.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Boiler, V.I.M. Boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
[40 CFR §60.40c(g)(1)]

As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
[40 CFR §60.40c(g)(2)]

As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [40 CFR §60.40c(g)(3)]

All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 CFR §60.40c(i)]

The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

[40 CFR §60.48c(a)(1)-(4)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: B-4-P	Emission unit name: VIM Boiler	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Vacuum Induction Melting Department used to produce steam in department.

Manufacturer: Cleaver Brooks	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26 MMBtu/hr

Maximum Hourly Throughput: tons/hr	Maximum Annual Throughput: tons/hr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 24,762 SCFH	Type and Btu/hr rating of burners: 26,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	14,566
Carbon Monoxide (CO)	--	10.0
Nitrogen Oxides (NO _x)	--	12.0
Lead (Pb)	--	6.1E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.92
Total Particulate Matter (TSP)	--	0.92
Sulfur Dioxide (SO ₂)	--	0.07
Volatile Organic Compounds (VOC)	--	0.67
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.9E-06
3-Methylchloranthrene	--	2.2E-07
7,12-Dimethylbenz(a)anthracene	--	1.9E-06
Acenaphthene	--	2.2E-07
Acenaphthylene	--	2.2E-07
Anthracene	--	2.9E-07
Benzene	--	2.5E-07
Benzo(a)anthracene	--	2.2E-07
Benzo(a)pyrene	--	1.5E-07
Benzo(b)fluoranthene	--	2.2E-07
Benzo(g,h,i)perylene	--	1.5E-07
Benzo(k)fluoranthene	--	2.2E-07
Chrysene	--	2.2E-07
Dibenzo(a,h)anthracene	--	1.5E-07
Dichlorobenzene	--	1.5E-04
Fluoranthene	--	3.6E-07
Fluorene	--	3.4E-07
Formaldehyde	--	9.1E-03
Hexane	--	0.22
Indenol(1,2,3,c,d)pyrene	--	2.2E-07
Naphthalene	--	7.4E-05
Phenanthrene	--	2.1E-06
Pyrene	--	6.1E-07

Toluene	--	4.1E-04
Arsenic	--	2.4E-05
Beryllium	--	1.5E-06
Cadmium	--	1.3E-04
Chromium	--	1.7E-04
Cobalt	--	1.0E-05
Manganese	--	4.6E-05
Mercury	--	3.2E-05
Nickel	--	2.5E-04
Selenium	--	2.9E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 9.54 pounds per hour for B-1-P and B-4-P.
[45CSR§2-4.1.b.]

4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2.]

4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4.]

4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 339.2 pounds per hour for B-1-P and B-4-P.
[45CSR§10-3.3.f.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 - 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 - 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 - 1. A detailed explanation of the factors involved or causes of the malfunction;
 - 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 - 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 - 4. The maximum opacity measured or observed during the malfunction;
 - 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-1A-P	Emission unit name: 23" Mill Furnace #1	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used in heating alloy cogs for bar and wire products.

Manufacturer: Flinn	Model number:	Serial number:
Construction date: 1969	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.8 Ton/hr

Maximum Hourly Throughput: 1.8 Ton/hr	Maximum Annual Throughput: 15,768 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.51
Total Particulate Matter (TSP)	--	0.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.04
Cobalt	--	0
Copper	--	9.2E-03
Manganese	--	5.6E-03
Nickel	--	0.20
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4 .1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-1B-P	Emission unit name: 23" Mill Furnace #2	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used in heating alloy cogs for bar and wire products.

Manufacturer: Flinn	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.8 tons/hr

Maximum Hourly Throughput: 1.8 tons/hr	Maximum Annual Throughput: 15,768 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit BW-1A-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit BW-1A-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-2-P	Emission unit name: Walking Beam Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Furnace located in the Bar and Wire Mill and is used for wire products.

Manufacturer: Selas	Model number:	Serial number:
Construction date: 2/1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7.5 tons/hr

Maximum Hourly Throughput: 7.5 tons/hr	Maximum Annual Throughput: 65,700 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 26,667 SCFH	Type and Btu/hr rating of burners: 28,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-3-P BW-12-P	Emission unit name: Looping Section 1 Looping Section 2	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

These units are located in the Bar and Wire Department. The looping sections are used in the manufacturing of wire products.

Manufacturer: Looping Section 1 —Kocks Looping Section 2 – Morgands Hammen	Model number:	Serial number:
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Construction date: Section 1- 1970 Section 2- 1971	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 4.5 Ton/hr.

Maximum Hourly Throughput: 4.5 Ton/hr.	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	3.60
Total Particulate Matter (TSP)	--	3.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.25
Cobalt	--	0
Copper	--	0.07
Manganese	--	0.04
Nickel	--	1.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-10-P	Emission unit name: Scholle Saw	List any control devices associated with this emission unit: Baghouse BW-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The saw is used to cut pieces coming out of the Bar and Wire Mill.

Manufacturer: Scholle	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4.5 Ton/hr

Maximum Hourly Throughput: 4.5 Ton/hr	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.20
Total Particulate Matter (TSP)	--	1.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.08
Cobalt	--	0
Copper	--	0.02
Manganese	--	0.01
Nickel	--	0.46
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Scholle Saw	BW-10-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-11-P	Emission unit name: Abrasive Cut-Off Machine	List any control devices associated with this emission unit: Baghouse BW-11-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The saw is used to cut pieces coming out of the Bar and Wire Mill.

Manufacturer: Tysman	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4.5 Ton/hr

Maximum Hourly Throughput: 4.5 Ton/hr	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.58
Total Particulate Matter (TSP)	--	0.58
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.04
Cobalt	--	0
Copper	--	0.01
Manganese	--	6.4E-03
Nickel	--	0.22
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CA-1-P	Emission unit name: Carpenter Shop Woodcutting Operations	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: 1958	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 Ton

Maximum Hourly Throughput: 1.5 Ton	Maximum Annual Throughput: 28,470 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.40
Total Particulate Matter (TSP)	--	1.40
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Mass Balance		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CA-2-P	Emission unit name: Carpenter Shop Woodcutting Operations	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: 1958	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 Ton

Maximum Hourly Throughput: 1.5 Ton	Maximum Annual Throughput: 28,470 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.77
Total Particulate Matter (TSP)	--	0.77
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Mass Balance</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-2-P	3

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-1-P CD-2-P	Emission unit name: West Pickle Tanks 12-15	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 31,500 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	6.5
Total Particulate Matter (TSP)	--	6.5
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	0.04
Nitric Acid (HNO ₃)	--	6.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-3-P CD-4-P	Emission unit name: West Pickle Tanks 9-11	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 19,665 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	7.8
Total Particulate Matter (TSP)	--	7.8
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	3.1
Sulfuric Acid (H ₂ SO ₄)	--	0.01
Nitric Acid (HNO ₃)	--	4.2
Ammonia (NH ₃)	--	0.45
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-5-P CD-6-P	Emission unit name: West Pickle Tanks 8,9	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 31,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.1
Total Particulate Matter (TSP)	--	2.1
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	0.35
Sulfuric Acid (H ₂ SO ₄)	--	0.61
Nitric Acid (HNO ₃)	--	1.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-7-P CD-8-P	Emission unit name: West Pickle Tank #7	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 8,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.10
Total Particulate Matter (TSP)	--	1.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nitric Acid (HNO ₃)	--	0.97
Hydrofluoric Acid (HF)	--	0.08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-9-P CD-10-P	Emission unit name: West Pickle Tank #5	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 8,650 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.30
Total Particulate Matter (TSP)	--	1.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nitric Acid (HNO ₃)	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-11-P CD-12-P	Emission unit name: West Pickle Tank #3	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 11,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.16
Total Particulate Matter (TSP)	--	0.16
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	0.16
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-13-P CD-14-P	Emission unit name: East Pickle	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides. Includes east pickle house tanks 51, 52, 53, 55, 56, 57, 58, 59.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1960	Installation date: 1960	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 73,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 3,713 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	4.40
Total Particulate Matter (TSP)	--	4.40
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	1.00
Nitric Acid (HNO ₃)	--	3.10
Hydrofluoric Acid (HF)	--	0.33
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-17-P	Emission unit name: East Cutters (3 Saws)	List any control devices associated with this emission unit: CD-17-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy rod cutting.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1960	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.275 tons/hr

Maximum Hourly Throughput: 0.275 tons/hr	Maximum Annual Throughput: 2,409 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	3.7E-03
Cobalt	--	2.8E-06
Copper	--	1.2E-04
Manganese	--	1.1E-04
Nickel	--	8.2E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
East Cutters (3 Saws)	CD-17-P	0.43

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-23-P	Emission unit name: West Cutters (3 Saws)	List any control devices associated with this emission unit: Baghouse CD-23-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy rod Cutting.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.36 tons/hr

Maximum Hourly Throughput: 0.36 tons/hr	Maximum Annual Throughput: 3154 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.36
Total Particulate Matter (TSP)	--	0.36
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.05
Cobalt	--	3.6E-05
Copper	--	1.5E-03
Manganese	--	1.4E-03
Nickel	--	0.11
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
West Cutters (3 Saws)	CD-23-P	0.57

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-31-P	Emission unit name: Grind Building Saw	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Small alloy rod cutting to length.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1950	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.46 tons/hr

Maximum Hourly Throughput: 0.46 tons/hr	Maximum Annual Throughput: 4,030 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.01
Cobalt	--	8.7E-06
Copper	--	3.8E-04
Manganese	--	3.3E-04
Nickel	--	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Grind Building Saw	CD-31-P	0.72

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-32-P	Emission unit name: West Pickle Salt Bath	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Surface treatment to remove oxides from products.

Manufacturer: Kolene	Model number:	Serial number:
Construction date: < 1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7.2 mmbtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,857 SCFH	Type and Btu/hr rating of burners: 7,200,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	3,604
Carbon Monoxide (CO)	--	2.50
Nitrogen Oxides (NO _x)	--	3.00
Lead (Pb)	--	1.5E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.23
Total Particulate Matter (TSP)	--	0.23
Sulfur Dioxide (SO ₂)	--	0.02
Volatile Organic Compounds (VOC)	--	0.17
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	7.2E-07
3-Methylchloranthrene	--	5.4E-08
7,12-Dimethylbenz(a)anthracene	--	4.8-E07
Acenaphthene	--	5.4E-08
Acenaphthylene	--	5.4E-08
Anthracene	--	7.2E-08
Benzene	--	6.3E-05
Benzo(a)anthracene	--	5.4E-08
Benzo(a)pyrene	--	3.6E-08
Benzo(b)fluoranthene	--	5.4E-08
Benzo(g,h,i)perylene	--	3.6E-08
Benzo(k)fluoranthene	--	5.4E-08
Chrysene	--	5.4E-08
Dibenzo(a,h)anthracene	--	3.6E-08
Dichlorobenzene	--	3.6E-05
Fluoranthene	--	9.0E-08
Fluorene	--	8.4E-08
Formaldehyde	--	2.3E-03
Hexane	--	0.05
Indenol(1,2,3,c,d)pyrene	--	5.4E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.8E-05
Phenanthrene	--	5.1E-07
Pyrene	--	1.5E-07
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	--	1.0E-04
Arsenic	--	6.0E-06
Beryllium	--	3.6E-07
Cadmium	--	3.3E-05
Chromium	--	4.2E-05
Cobalt	--	2.5E-06
Manganese	--	1.1E-05
Mercury	--	7.8E-06
Nickel	--	6.3E-05
Selenium	--	7.2E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-36-P	Emission unit name: Cold Draw Hard Chrome Plating	List any control devices associated with this emission unit: CD-36-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two hard chrome plating tanks utilized for placing a thick chrome layer on various tools & dies used in the cold draw department primarily, but also in other areas of the plant. The process unit consists of primary and secondary chrome plating tanks. Tank #2 is the primary tank and it has an electrical capacity of 600 amps. Tank #1 is the secondary tank and it has an electrical capacity of 400 amps. Both tank's contents consist of 440 pounds of chromic acid and 800 liters of sulfuric acid. In addition to the two chromic acid tanks there is a sulfuric etch tank and there is a stripping tank.

The hard chrome plating process at our facility is a "small" hard chrome plating process according to EPA standards. Our maximum potential cumulative rectifier capacity of 5,880,000 amp-hrs/yr. is far below the 60,000,000 amp-hrs/yr small source cutoff.

Manufacturer: Unknown	Model number:	Serial number:
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Construction date: 01/01/1950	Installation date: 05/01/1950	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,880,000 amp-hrs/yr

Maximum Hourly Throughput: 12 tons/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	6.1E-05
Total Particulate Matter (TSP)	--	6.1E-05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	5.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>A stack test was conducted on this source in December, 1996 to determine compliance with the NESHAP regulatory limits. The source was found to be in compliance with the NESHAP emission limitation for the hard chromium plating subcategory.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]

12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]

12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]

12.1.4. The work practice standards of this section address operation and maintenance practices. All owners or operators subject to the standards of this section are subject to these work practice standards.

(1) (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by Section 12.1.4.(2) of this permit.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by Section 12.1.4.(2) of this permit.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
[45CSR34 and 40 C.F.R. § 63.342(f)(1)]

(2) (i) The owner or operator of an affected source subject to the work practices of Section 12.1.4.(1) of this permit shall prepare an operation and maintenance plan to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in 40 C.F.R. § 63.342(f)(3) (A) through (E).

(ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(iii) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by Section 12.1.4.(2)(i) of this permit, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.

(iv) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 C.F.R. 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

[45CSR34 and 40 C.F.R. § 63.342(f)(3)]

12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.
[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

12.3.1. Performance tests shall be conducted using the test methods and procedures in sections 40 C.F.R. §§ 63.344(c)(1), 63.344(d)(2)(ii), 63.344(d)(5), 63.344(e)(2), and 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(9) of 40 C.F.R. § 63.344. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
[45CSR34 and 40 C.F.R. § 63.344(a)]

12.4.1. (a) The owner or operator of each affected source subject to the standards of 40 C.F.R. § 63.346 shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N.

(b) The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.

(1) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

(2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;

(3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;

(4) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;

(5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);

(6) Test reports documenting results of all performance tests;

(7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 C.F.R. § 63.344(e);

(8) Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;

(9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;

(10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;

(11) The total process operating time of the affected source during the reporting period;

(12) All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.

(c) All records shall be maintained for a period of 5 years in accordance with 40 C.F.R. § 63.10(b)(1).

[45CSR34 and 40 C.F.R. § 63.346]

12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.

[45CSR34 and 40 C.F.R. § 63.347(a)]

12.5.2. Ongoing compliance status reports for major sources. The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.

[45CSR34 and 40 C.F.R. § 63.347(g)]

12.5.3. Contents of ongoing compliance status reports. The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).

[45CSR34 and 40 C.F.R. § 63.347(g)(3)]

12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-38-P	Emission unit name: West Pickle Ammonia Tank	List any control devices associated with this emission unit: CD-38-C Ammonia Scrubber
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit CD-3-P & CD-4-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit CD-3-P & CD-4-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-39-P	Emission unit name: Rod Cell Saw	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy tube cutting to length.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 tons/hr

Maximum Hourly Throughput: 0.5 tons/hr	Maximum Annual Throughput: 4380 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.01
Cobalt	--	9.5E-06
Copper	--	4.1E-04
Manganese	--	3.6E-04
Nickel	--	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-40-P	Emission unit name: Centro Metalcut Type CAC 1220 Abrasive Saw	List any control devices associated with this emission unit: CD-40-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy tubes, rods, and rounds will be taken to the saw to be finish cut into customer specifications.

Manufacturer: Centro-Metalcut	Model number: CAC 1220	Serial number:
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Construction date: 2010	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,708 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	5.60
Total Particulate Matter (TSP)	--	5.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.56
Cobalt	--	0.14
Copper	--	0.27
Manganese	--	0.03
Nickel	--	2.50
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Volume removed from saw blade thickness and baghouse control efficiency.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 – R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.4.2. Record of Maintenance of Air Pollution Control Equipment. For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163]

7.4.3. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-1-P	Emission unit name: Schluter Grinder	List any control devices associated with this emission unit: Baghouse CS-1-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Schluter	Model number:	Serial number:
Construction date: 1964	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.55 tons/hr

Maximum Hourly Throughput: 0.55 tons/hr	Maximum Annual Throughput: 4,818 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.51
Total Particulate Matter (TSP)	--	0.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.07
Cobalt	--	3.6E-03
Copper	--	0.03
Manganese	--	2.7E-03
Nickel	--	0.27
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Schluter Grinder	CS-1-P	0.41

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-2-P	Emission unit name: Norton Grinder	List any control devices associated with this emission unit: Baghouse CS-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Norton	Model number:	Serial number:
Construction date: 1958	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.15 tons/hr

Maximum Hourly Throughput: 1.15 tons/hr	Maximum Annual Throughput: 10,074 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.10
Total Particulate Matter (TSP)	--	1.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.14
Cobalt	--	7.6E-03
Copper	--	0.06
Manganese	--	5.6E-03
Nickel	--	0.57
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Norton Grinder	CS-2-P	0.85

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-3-P	Emission unit name: # 1 Centro-M Grinder	List any control devices associated with this emission unit: Baghouse CS-3-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Centro Maskin	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.05 tons/hr

Maximum Hourly Throughput: 1.05 tons/hr	Maximum Annual Throughput: 9,198 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.98
Total Particulate Matter (TSP)	--	0.98
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.13
Cobalt	--	6.9E-03
Copper	--	0.06
Manganese	--	5.1E-03
Nickel	--	0.52
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#1 Centro-M Grinder	CS-3-P	0.77

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-4-P	Emission unit name: #2 Centro-M Grinder	List any control devices associated with this emission unit: Baghouse CS-4-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Centro Maskin	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.05 tons/hr

Maximum Hourly Throughput: 1.05 tons/hr	Maximum Annual Throughput: 9,198 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.98
Total Particulate Matter (TSP)	--	0.98
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.13
Cobalt	--	7.0E-03
Copper	--	0.06
Manganese	--	5.1E-03
Nickel	--	0.52
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#2 Centro-M Grinder	CS-4-P	0.78

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MA-4-P	Emission unit name: Salem Tip-up Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one Heat Treat furnace located in the Machine Shop department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the heat treating (annealing) of alloy products.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 12/01/1993	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14.46 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 13,771 SCFH	Type and Btu/hr rating of burners: 14,460,000 Btu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2.5 ppm	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,238
Carbon Monoxide (CO)	--	5.1
Nitrogen Oxides (NO _x)	--	3.0
Lead (Pb)	--	3.0E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.46
Total Particulate Matter (TSP)	--	0.46
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	1.4E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	9.7E-07
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.4E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.2E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.2E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.2E-08
Dichlorobenzene	--	7.2E-05
Fluoranthene	--	1.8E-07
Fluorene	--	1.7E-07
Formaldehyde	--	4.5E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.7E-05
Phenathrene	--	1.0E-06
Pyrene	--	3.0E-07
Toluene	--	2.1E-04
Arsenic	--	1.2E-05
Beryllium	--	7.2E-07
Cadmium	--	6.6E-05
Chromium	--	8.4E-05
Cobalt	--	5.1E-06
Manganese	--	2.3E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.4. In accordance with the permit application and its amendments, discharge from the Salem Tip-up furnace (MA-4-P) to the roof vent fans shall not exceed the following limitations:

Particulate	0.07 lb/hr
SO2	0.01 lb/hr
NOx	1.93 lb/hr
CO	0.48 lb/hr
VOC	0.04 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1646 and 45CSR§7-4.1.]

5.1.5. In accordance with the permit application and its amendments, natural gas consumption in the Salem Tip-up furnace (MA-4-P) shall not exceed 13,800 cf/hr.
[45CSR13 - R13-1646]

5.1.6. In accordance with the permit application and its amendments, the Salem Tip-up furnace (MA-4-P) shall not process more than 20,000 lb/hr of alloy rods.
[45CSR13 - R13-1646]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

5.4.1. The permittee shall maintain records showing the amount of natural gas fired monthly in the Salem Tip-up furnace (MA-4-P) as required in Section 5.1.5. Such records shall be maintained by the permittee for at least three (3) years. Monthly records shall be made available to the Director or his duly authorized representative upon request. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1646]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MA-5-P	Emission unit name: MA-5-P Tip up furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 This emission unit consists of one Heat Treat furnace located in the Machine Shop department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the heat treating (annealing) of alloy products.

Manufacturer: O'Brien and Gere	Model number: 50'	Serial number:
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Construction date: 2015	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 15.2 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 14,476 SCFH	Type and Btu/hr rating of burners: 15,200,000 Btu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

 Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2.5	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,238
Carbon Monoxide (CO)	--	5.1
Nitrogen Oxides (NO _x)	--	3.0
Lead (Pb)	--	3.0E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.46
Total Particulate Matter (TSP)	--	0.46
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	1.4E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	9.7E-07
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.4E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.2E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.2E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.2E-08
Dichlorobenzene	--	7.2E-05
Fluoranthene	--	1.8E-07
Fluorene	--	1.7E-07
Formaldehyde	--	4.5E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.7E-05
Phenathrene	--	1.0E-06
Pyrene	--	3.0E-07
Toluene	--	2.1E-04
Arsenic	--	1.2E-05
Beryllium	--	7.2E-07
Cadmium	--	6.6E-05
Chromium	--	8.4E-05
Cobalt	--	5.1E-06
Manganese	--	2.3E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.4. In accordance with the permit application and its amendments, discharge from the MA-S-P Tip-up furnace to the roof vent fans shall not exceed the following limitations:

Particulate	0.11 lb/hr
SO ₂	0.01 lb/hr
NO _x	1.45 lb/hr
CO	1.22 lb/hr
VOC	0.08 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1. [45CSR13 - R13-1646 and 45CSR§7-4.1.]

5.1.5. In accordance with the permit application and its amendments, natural gas consumption in the MA-5-P Tip-up furnace shall not exceed 14,476 cf/hr.
[45CSR13 - R13-1646]

5.1.6. In accordance with the permit application and its amendments, the Tip-up furnace MA-5-P shall not process more than 30,000 lb/hr of alloy rods.
[45CSR13 - R13-1646]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-A	Emission unit name: Argon Oxygen Reactor (AOD)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used to introduce oxygen and argon to a melted alloy heat of metal to improve the quality.

Manufacturer: Pecor	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Furnace dust chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-B	Emission unit name: #5 Electric Arc Furnace (EAF)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used on the melting of non-ferrous nickel alloys.

Manufacturer: Lectromag	Model number:	Serial number:
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Construction date: 1971	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Dust chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#5 Electric Arc Furnace	MS-1B	11.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4 .1]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-D	Emission unit name: #4 Electric Arc Furnace (EAF)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used on the melting of non-ferrous nickel alloys.

Manufacturer: Lectromag	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.80
Total Particulate Matter (TSP)	--	2.80
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.09
Cobalt	--	2.5E-03
Copper	--	0.08
Lead	--	1.2E-03
Manganese	--	0.03
Mercury	--	4.3E-05
Nickel	--	0.41
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42, Bag-House Dust Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source or operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#4 Electric Arc Furnace	MS-1D	11.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1E-P	Emission unit name: Wire Feeder	List any control devices associated with this emission unit: MS-1-C2, MS-1-C1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Melt Shop, used for adding raw wire materials into the ladle.

Manufacturer: PC Campana	Model number:	Serial number:
Construction date: 2005	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35 Tons/hr

Maximum Hourly Throughput: 35 Tons/hr	Maximum Annual Throughput: 306,600 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.
[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-2-P	Emission unit name: Powder Torch	List any control devices associated with this emission unit: Baghouse MS-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located on the north side of the Refinery Melt Shop. The powder torch is used in cutting scrap metal into smaller more manageable pieces that can be placed back into the furnaces.

Manufacturer: Lindle	Model number:	Serial number:
Construction date: 1962	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35 tons/hr

Maximum Hourly Throughput: 35 tons/hr	Maximum Annual Throughput: 306,600 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes ___ <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.0E-03
Cobalt	--	2.8E-05
Copper	--	8.5E-04
Manganese	--	3.7E-04
Nickel	--	4.5E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Bag-House Dust Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Powder Torch	MS-2	5.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-9-P	Emission unit name: Lime Storage Silo	List any control devices associated with this emission unit: Baghouse MS-9-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This process group consists of two lime storage bins located at the melt shop. The lime storage bin is the conveying method for pebble lime that is utilized by the melt shop as a raw material in alloy production. The lime bin has a control device to capture lime emissions during bin loading operations. The baghouse dust collector is mounted in the roof of the storage bin.

Manufacturer: Unknown	Model number:	Serial number:
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Construction date: 1975	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15 Tons/hour

Maximum Hourly Throughput:	Maximum Annual Throughput: 5,979 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.10
Total Particulate Matter (TSP)	--	0.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Reg. 7 Sections 3.1 and 3.2 -
The emission methods utilized to determine actual emission rates were as follows:

- 99.9% efficiency baghouse - manufacturers data

Emission rate limits based on average pound per hour process rates (and duplicate sources where applicable) were calculated and compared to the estimated emissions of each process.

Reg.7. Actual Emissions & Allowable Emission Rates
Pounds per Hour

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]

10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

10.4.1. The permittee shall maintain the design information on the baghouse at the facility.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-1 & 2-P	Emission unit name: #1 Primary Rolling Mill	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Primary Mill Department. The equipment is used for the rolling of alloy into plates.

Manufacturer: Mesta	Model number:	Serial number:
Construction date: 1964	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50 tons/hr

Maximum Hourly Throughput: 50 tons/hr	Maximum Annual Throughput: 438,000 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	17.0
Total Particulate Matter (TSP)	--	17.0
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.20
Cobalt	--	0
Copper	--	0.31
Manganese	--	0.19
Nickel	--	6.80
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emission Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#1 Primary Rolling Mill	PM-1&2P	24.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-3-P	Emission unit name: Plasma Cutting Torch	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Primary Mill Department. The equipment is used for the cutting of alloy slabs.

Manufacturer: Thermal Dynamics	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 tons/hr

Maximum Hourly Throughput: 1.5 tons/hr	Maximum Annual Throughput: 13,140 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.80
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.25
Cobalt	--	6.7E-03
Copper	--	0.06
Manganese	--	0.01
Nickel	--	1.10
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plasma Torch	PM-3-P	3.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-4-P	Emission unit name: Grit Blaster (Plate Cleaning Machine)	List any control devices associated with this emission unit: Baghouse PM-4-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 Located in the Primary Mill, used to surface clean large plate product.

Manufacturer: Pangborn	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 1.95 tons/hr

Maximum Hourly Throughput: 1.95 tons/hr	Maximum Annual Throughput: 17,802 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___ <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
 N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	1.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.15
Cobalt	--	1.2E-04
Copper	--	5.0E-03
Manganese	--	4.4E-03
Nickel	--	0.34
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-5-P	Emission unit name: Southeast Grinder	List any control devices associated with this emission unit: Baghouse PM-5-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Midwest	Model number:	Serial number:
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Construction date: 1980	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.30
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southeast Grinder	PM-5-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-6-P	Emission unit name: Southwest Grinder	List any control devices associated with this emission unit: Baghouse PM-6 & 25-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Centro Maskin	Model number:	Serial number:
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Construction date: 1974	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.3
Total Particulate Matter (TSP)	--	2.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southwest Grinder	PM-6-P	2.99

[45CSR§7-4.1., 45CSR13 – R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-7-P	Emission unit name: Northeast Grinder	List any control devices associated with this emission unit: Baghouse PM-7-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Centro Maskin	Model number:	Serial number:
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Construction date: 1965	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northeast Grinder	PM-7-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-8-P	Emission unit name: Northwest Grinder	List any control devices associated with this emission unit: Baghouse PM-8-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Tysamen	Model number:	Serial number:
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Construction date: 1966	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northwest Grinder	PM-8-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-10A-P PM-10B-P	Emission unit name: F-2 Forge Furnace 21 F-2 Forge Furnace 22	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating (forging) furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Olsen	Model number:	Serial number:
Construction date: 1989	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 3.1875 tons/hr each

Maximum Hourly Throughput: 3.1875 tons/hr each	Maximum Annual Throughput: 27,922.5 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 9,524 SCFH	Type and Btu/hr rating of burners: 10,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	245,048
Carbon Monoxide (CO)	--	172
Nitrogen Oxides (NO _x)	--	204
Lead (Pb)	--	1.0E-03
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	16.0
Total Particulate Matter (TSP)	--	16.0
Sulfur Dioxide (SO ₂)	--	1.20
Volatile Organic Compounds (VOC)	--	11.0
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	4.9E-05
3-Methylchloranthrene	--	3.7E-06
7,12-Dimethylbenz(a)anthracene	--	3.3E-05
Acenaphthene	--	3.7E-06
Acenaphthylene	--	3.7E-06
Anthracene	--	4.9E-06
Benzene	--	4.3E-03
Benzo(a)anthracene	--	3.7E-06
Benzo(a)pyrene	--	2.5E-06
Benzo(b)fluoranthene	--	3.7E-06
Benzo(g,h,i)perylene	--	2.5E-06
Benzo(k)fluoranthene	--	3.7E-06
Chrysene	--	3.7E-06
Dibenzo(a,h)anthracene	--	2.5E-06
Dichlorobenzene	--	2.5E-03
Fluoranthene	--	6.1E-06
Fluorene	--	5.7E-06
Formaldehyde	--	0.15
Hexane	--	3.7
Indenol(1,2,3,c,d)pyrene	--	3.7E-06

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.2E-03
Pyrene	--	1.0E-05
Toluene	--	6.9E-03
Arsenic	--	4.1E-04
Beryllium	--	2.5E-05
Cadmium	--	2.2E-03
Chromium	--	2.9E-03
Cobalt	--	1.7E-04
Manganese	--	7.8E-04
Mercury	--	5.3E-04
Nickel	--	4.3E-03
Selenium	--	4.9E-05
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-11-P	Emission unit name: F-3 Forge Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating (forging) furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air through a dedicated stack. The furnace is used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Salem	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3.1875 tons/hr

Maximum Hourly Throughput: 3.1875 tons/hr	Maximum Annual Throughput: 27,922.5 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 54,286 SCFH	Type and Btu/hr rating of burners: 57,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 40CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR §10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-12A-P PM-12B-P	Emission unit name: F-4 Ingot Furnace 41 F-4 Ingot Furnace 42	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: A- 1992 B- 1992	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 2.835 tons/hr each

Maximum Hourly Throughput: 2.835 tons/hr each	Maximum Annual Throughput: 24,834.6 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 11,429 SCFH	Type and Btu/hr rating of burners: 12,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-13-P	Emission unit name: F-5 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air. The furnace is used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 40,000 SCFH	Type and Btu/hr rating of burners: 42,000,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P.		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P.		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Ingot Furnace F-5	PM-13-P	11.20

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-14-P PM-15-P	Emission unit name: F-6 Ingot Furnace F-7 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Flinn & Dreffein	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 4.5 tons/hr each

Maximum Hourly Throughput: 4.5 tons/hr each	Maximum Annual Throughput: 39,420 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 71,429 SCFH	Type and Btu/hr rating of burners: 75,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Ingot Furnace F-6	PM-14-P	9.00
Ingot Furnace F-7	PM-15-P	9.00

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-16-P	Emission unit name: F-8 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air. The furnace is used for the heating of alloy ingots.

Manufacturer: Flinn & Dreffein	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 34,286 SCFH	Type and Btu/hr rating of burners: 36,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-17A-P PM-17B-P	Emission unit name: F-9 Ingot Furnace 91 F-9 Ingot Furnace 92	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: 1992	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 2.835 tons/hr each

Maximum Hourly Throughput: 2.835 tons/hr each	Maximum Annual Throughput: 24,834.6 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 11,429 SCFH	Type and Btu/hr rating of burners: 12,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.71]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-18-P PM-19-P	Emission unit name: #1 Carbottom Furnace #3 Carbottom Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy plate and coil products.

Manufacturer: Modern Industrial Heating	Model number:	Serial number:
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Construction date: #1 <1970 #3 <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 18.0 mmbtu/hr each

Maximum Hourly Throughput: 18.0 mmbtu/hr each	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 17,143 SCFH	Type and Btu/hr rating of burners: 18,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-20-P	Emission unit name: PM Plate Plasma Torch	List any control devices associated with this emission unit: Baghouse PM-20-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The plasma torch is a gas cutting torch that is utilized for squaring up the ends of plate alloy stock before it is processed through the stretch leveler.

Manufacturer: Thermal Dynamics Corp.	Model number: PAK 10XR	Serial number:
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Construction date: 10/01/1989	Installation date: 10/15/1989	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2.5 tons/hr

Maximum Hourly Throughput: 2.5 tons/hr	Maximum Annual Throughput: 21,900 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.11
Total Particulate Matter (TSP)	--	0.11
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	9.7E-03
Cobalt	--	2.6E-04
Copper	--	2.2E-03
Manganese	--	5.4E-04
Nickel	--	0.04
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions were estimated by using stack test data from the other plasma torch in primary mill.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1.]

6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 lb/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1165 and 45CSR§7-4.1.]

6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.
[45CSR13 - R13-1165]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-23-P	Emission unit name: PM Plate Anneal Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one plate anneal furnace located in the primary mill department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the annealing of alloy products.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 09/07/1993	Installation date: 09/07/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 Tons/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/5
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 24,762 SCFH	Type and Btu/hr rating of burners: 26,000,000 Btu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	13,015
Carbon Monoxide (CO)	--	9.1
Nitrogen Oxides (NO _x)	--	17.0
Lead (Pb)	--	5.4E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.82
Total Particulate Matter (TSP)	--	0.82
Sulfur Dioxide (SO ₂)	--	0.07
Volatile Organic Compounds (VOC)	--	0.60
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.6E-06
3-Methylchloranthrene	--	2.0E-07
7,12-Dimethylbenz(a)anthracene	--	1.7E-06
Acenaphthene	--	2.0E-07
Acenaphthylene	--	2.0E-07
Anthracene	--	2.6E-06
Benzene	--	2.3E-04
Benzo(a)anthracene	--	2.0E-07
Benzo(a)pyrene	--	1.3E-07
Benzo(b)fluoranthene	--	2.0E-07
Benzo(g,h,i)perylene	--	1.3E-07
Benzo(k)fluoranthene	--	2.0E-07
Chrysene	--	2.0E-07
Dibenzo(a,h)anthracene	--	1.3E-07
Dichlorobenzene	--	1.3E-04
Fluoranthene	--	3.3E-07
Fluorene	--	3.0E-07
Formaldehyde	--	8.1E-03
Hexane	--	0.20
Indenol(1,2,3,c,d)pyrene	--	2.0E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	6.6E-05
Pyrene	--	5.4E-07
Toluene	--	3.7E-04
Arsenic	--	2.2E-05
Beryllium	--	1.3E-06
Cadmium	--	1.2E-04
Chromium	--	1.5E-04
Cobalt	--	9.1E-06
Manganese	--	4.1E-05
Mercury	--	2.8E-05
Nickel	--	2.3E-04
Selenium	--	2.6E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0×10^6 Btu/hr.
[45CSR13 - R13-1767]

5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

- Particulates 0.075 lb/hr
- Sulfur Dioxide 0.015 lb/hr
- Nitrogen Oxide 2.5 lb/hr
- Carbon Monoxide 0.875 lb/hr
- Total Hydrocarbons 0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1767 and 45CSR§7-4.1. (PM-23-P)]

5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.
[45CSR13 - R13-1767]

5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.
[45CSR13 - R13-1767]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NOx emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767 and 45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the *Schedule of Compliance Form* as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-25-P	Emission unit name: Southcentral Grinder	List any control devices associated with this emission unit: Baghouse PM-6 & 25-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Midwest	Model number:	Serial number:
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Construction date: 1966	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
---	--

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southcentral Grinder	PM-25-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-26-P	Emission unit name: Northcentral Grinder	List any control devices associated with this emission unit: Baghouse PM-26-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Beardsley piper9	Model number:	Serial number:
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Construction date: 1980	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northcentral Grinder	PM-26-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-28-P PM-29-P	Emission unit name: PM Forge Furnace F-101 PM Forge Furnace F-102	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating (forging) furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 01/01/1998	Installation date: 04/01/1998	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 6.5 tons/hr each

Maximum Hourly Throughput: 6.5 tons/hr each	Maximum Annual Throughput: 56,940 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,509
Carbon Monoxide (CO)	--	5.3
Nitrogen Oxides (NO _x)	--	3.1
Lead (Pb)	--	3.1E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.48
Total Particulate Matter (TSP)	--	0.48
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.34
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	1.5E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	1.0E-06
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.5E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.5E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.5E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.5E-08
Dichlorobenzene	--	7.5E-05
Fluoranthene	--	1.9E-07
Fluorene	--	1.8E-07
Formaldehyde	--	4.7E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.8E-05
Pyrene	--	3.1E-07
Toluene	--	2.1E-04
Arsenic	--	1.3E-05
Beryllium	--	7.5E-07
Cadmium	--	6.9E-05
Chromium	--	8.8E-05
Cobalt	--	5.3E-06
Manganese	--	2.4E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.5E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45C SR§10-4.1.]

5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission Rate for Two Furnaces	
	(lb/hr)	(tons/yr) ⁽²⁾	(lb/hr)	(tons/yr)
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: (1) Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

(2) Annual emissions are based on an operating schedule of 8,760 hours per year.

[45CSR13 - R13-2163, and 45CSR§7-4.1.]

5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.
[45CSR13 - R13-2163]

5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NO_x burners for each furnace not to exceed 1.25 MM Btu/hr heat input).
[45CSR13 - R13-2163]

5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).
[45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described.

[45CSR13-R13-2163]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SC-1-P	Emission unit name: Service Center Wood Saws	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 Ton

Maximum Hourly Throughput: 0.5 Ton	Maximum Annual Throughput: 9,490 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.05
Total Particulate Matter (TSP)	--	0.05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Mass Balance</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wood Saws	SC-1-P	1

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SC-2-P	Emission unit name: Service Center Finish Saw	List any control devices associated with this emission unit: SC-2-C Wet Mist Scrubber
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Service Center, used to finish cut alloy material.

Manufacturer: Savage	Model number:	Serial number:
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Construction date: 1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 Tons/hr

Maximum Hourly Throughput: 0.5 Tons/hr	Maximum Annual Throughput: 4,380 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	4.1
Total Particulate Matter (TSP)	--	4.1
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.10
Copper	--	0.20
Manganese	--	0.02
Nickel	--	1.9
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-1-P	Emission unit name: CAP Line Pickling	List any control devices associated with this emission unit: SM-1-C Mist Eliminator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Continuous Anneal & Pickle (CAP) Line is a series of furnaces and pickling tanks to continuously anneal and pickle long coils of strip end to end.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1966	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 Tons per hour

Maximum Hourly Throughput: 6 Tons	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.4
Total Particulate Matter (TSP)	--	1.4
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	0.22
Nitric Acid (HNO ₃)	--	0.66
Hydrofluoric Acid (HF)	--	0.55
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-2-P	Emission unit name: CAP Shot Blaster	List any control devices associated with this emission unit: Wet Scrub SM-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located on the CAP line in the Sheet and Strip Mill. The shot blaster is used to remove oxide from alloy sheet.

Manufacturer: Pangborn	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	1.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel (Ni)	--	0.14
Copper (Cu)	--	0.01
Chromium (Cr)	--	0.07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Used Shot Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
CAP Shot Blaster	SM-2-P	9.15

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-3-P	Emission unit name: MKW Mill	List any control devices associated with this emission unit: Mist Eliminator SM-3-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Sheet and Strip Mill, used to cold roll alloy strip to smaller gauge.

Manufacturer: Schloeman	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3.8 tons/hr

Maximum Hourly Throughput: 3.8 tons/hr	Maximum Annual Throughput: 33,288 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	3.50
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel (Ni)		
Copper (Cu)		
Chromium (Cr)		
Manganese (Mn)		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
MKW Rolling Mill	SM-3-P	6.68

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-5-P	Emission unit name: CAP Line Salt Bath	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Surface treatment to remove oxides from products.

Manufacturer: Kolene	Model number:	Serial number:
Construction date: 1969	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
20 tons/hr

Maximum Hourly Throughput: 20 tons/hr	Maximum Annual Throughput: 175,200 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,571 SCFH	Type and Btu/hr rating of burners: 6,900,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	789	3,454
Carbon Monoxide (CO)	--	2.4
Nitrogen Oxides (NO _x)	--	1.4
Lead (Pb)	--	1.4E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.22
Total Particulate Matter (TSP)	--	0.22
Sulfur Dioxide (SO ₂)	--	0.02
Volatile Organic Compounds (VOC)	--	0.16
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	6.9E-07
3-Methylchloranthrene	--	5.2E-08
7,12-Dimethylbenz(a)anthracene	--	4.6E-07
Acenaphthene	--	5.2E-08
Acenaphthylene	--	5.2E-08
Anthracene	--	6.9E-08
Benzene	--	6.0E-05
Benzo(a)anthracene	--	5.2E-08
Benzo(a)pyrene	--	3.5E-08
Benzo(b)fluoranthene	--	5.2E-08
Benzo(g,h,i)perylene	--	3.5E-08
Benzo(k)fluoranthene	--	5.2E-08
Chrysene	--	5.2E-08
Dibenzo(a,h)anthracene	--	3.5E-08
Dichlorobenzene	--	3.5E-05
Fluoranthene	--	8.6E-08
Fluorene	--	8.1E-08
Formaldehyde	--	2.2E-03
Hexane	--	0.05
Indenol(1,2,3,c,d)pyrene	--	5.2E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.8E-05
Phenanthrene	--	4.9E-07
Pyrene	--	1.4E-07
Toluene	--	9.8E-05
Arsenic	--	5.8E-06
Beryllium	--	3.5E-07
Cadmium	--	3.2E-05
Chromium	--	4.0E-05
Cobalt	--	2.4E-06
Manganese	--	1.1E-05
Mercury	--	7.5E-06
Nickel	--	6.0E-05
Selenium	--	6.9E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [45CSR§10-11.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit. [45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day. [45CSR§10-3.8.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-6-P	Emission unit name: CAP Preheat Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The furnace is located in the Strip Mill Department on the CAP Line and is used in the preheating process of sheet products. The emissions are vented to indoor air.

Manufacturer: Drever	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 19,048 SCFH	Type and Btu/hr rating of burners: 20,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-7-P	Emission unit name: CAP Equalize Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The furnace is located in the Strip Mill Department on the CAP Line and is used in the process of sheet products. The emissions are vented to indoor air.

Manufacturer: Drever	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 15,714 SCFH	Type and Btu/hr rating of burners: 16,500,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 – R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-10-P	Emission unit name: # 2 CBU Grinder	List any control devices associated with this emission unit: SM-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to surface grind alloy strip.

Manufacturer: Hillacme	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2 tons/hr

Maximum Hourly Throughput: 2 tons/hr	Maximum Annual Throughput: 17,520 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.3E-03
Cobalt	--	4.5E-05
Copper	--	6.9E-05
Manganese	--	2.7E-05
Nickel	--	3.7E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-1-P	Emission unit name: Tumble Blaster	List any control devices associated with this emission unit: TP-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer: OMSG Shotblaster	Model number: Type SG10 H2 Metal Slat Tumblasts	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 119,912 lbs/yr (lbs of steel shot purchased)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.02
Total Particulate Matter (TSP)	--	0.02
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day

[45CSR13 - Permit R13-2532]

13.1.4 Particulate Matter emissions from the Tumble Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

13.1.8. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10-C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532 and 45CSR§13-5.11.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.2. For Baghouse TP-10-C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

13.3.3. Record of Maintenance of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

13.3.4. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-2-P	Emission unit name: Plasma Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the size of large scrap, the plasma cutter cuts the material into smaller pieces.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Cut metal scrap: 5,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X___ No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.20
Total Particulate Matter (TSP)	--	2.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel	--	1.30
Chromium	--	0.57
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Based on testing at Huntington Revert facility measuring net mass lost during plasma cutting. HAPs based on annual average HAP contained in metal processed, as determined from 2008 TRI data.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532]

14.1.2. Emission Point (TP-2-S) - Plasma Cutter PM Emissions. The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.50	1.75
Hazardous Air Pollutants (HAP)	0.43	1.49

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-2-P	Plasma Cutter	5,000	21,900

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532, Condition 5.1.24.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-3-P	Emission unit name: Plasma Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer: Thermal Dynamics	Model number: PAK 45 Plasma Cutter	Serial number:
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Construction date: 2002	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.20
Total Particulate Matter (TSP)	--	2.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.57
Nickel	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Plasma Cutter (TP-3P)	0.5	2.19

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Plasma Cutter	Pounds Cut	18,000 pounds per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- b. The pounds of material cut by the plasma cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-4-P	Emission unit name: Arc Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 13,693 #rods/yr (Number of rods used)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.38
Total Particulate Matter (TSP)	--	0.38
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 1 (TP-4P)	0.05	0.21

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	960 per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
 a. The date, place as defined in this permit and time of sampling or measurements;
 b. The date(s) analyses were performed;
 c. The company or entity that performed the analyses;
 d. The analytical techniques or methods used;
 e. The results of the analyses; and
 f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-5-P	Emission unit name: Arc Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable).

Arc welding unit.

Manufacturer:	Model number:	Serial number:
Construction date: 2006	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 13,693 #rods/yr (Number of rods used)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit TP-4-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit TP-4-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 2 (TP-5P)	0.05	0.21

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	960 per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-6-P	Emission unit name: Cabinet Blaster	List any control devices associated with this emission unit: TP-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer:	Model number:	Serial number:
2002		
Construction date:	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 69,180 lbs/yr (lbs of abrasive product purchased)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Cabinet Blaster (TP-6P)	0.01	0.03

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Cabinet Blasting	Pounds of Shot Used	200 pounds per day

[45CSR13 - Permit R13-2532]

13.1.3 Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

13.1.8. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10-C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532 and 45CSR§13-5.11.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.
[45CSR13 - Permit R13-2532]

13.3.2. For Baghouse TP-10-C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.
[45CSR§30-5.1.c.]

13.3.3. Record of Maintenance of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

13.3.4. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.
For each such case associated with an equipment malfunction, the additional information shall also be recorded:
e. The cause of the malfunction.
f. Steps taken to correct the malfunction.
g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:
a. The amount of shot used in the tumble blaster and cabinet blaster.
[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-7A-P	Emission unit name: Rotary Borings Kiln 1	List any control devices associated with this emission unit: TP-7A-1C, Cyclone TP-7A-2C, Thermal Oxidizer TP-7A-3C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary burn-off kiln heats the scrap metal to vaporize any oils and water present. The clean and dry scrap metal will exit from one end of the rotary kiln while the hot exhaust gases containing vaporized oils and water will exit the kiln at the other end. After exiting the kiln, these exhaust gases will be heated to above 600 °F in a smoke hood in order to prevent condensation of volatilized oils in the ducting system. The smoke hood will provide direct heat to the exhaust stream via a 0.75 MMBtu/hr natural gas burner.

Manufacturer: EnviroAir Inc. (CORECO)	Model number: Model BD-60	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Dirty scrap metal: 8,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: Smoke Hood at 0.75 MMBtu/hr	Type and Btu/hr rating of burners: Smoke Hood: one burner rated at 0.75 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,417
Carbon Monoxide (CO)	--	0.99
Nitrogen Oxides (NO _x)	--	1.20
Lead (Pb)	--	5.9E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)	--	7.1E-03
Volatile Organic Compounds (VOC)	--	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.8E-07
3-Methylchloranthrene	--	2.1E-08
7,12-Dimethylbenz(a)anthracene	--	1.9E-07
Acenaphthene	--	2.1E-08
Acenaphthylene	--	2.1E-08
Anthracene	--	2.8E-08
Benzene	--	2.5E-05
Benzo(a)anthracene	--	2.1E-08
Benzo(a)pyrene	--	1.4E-08
Benzo(b)fluoranthene	--	2.1E-08
Benzo(g,h,i)perylene	--	1.4E-08
Benzo(k)fluoranthene	--	2.1E-08
Chrysene	--	2.1E-08
Dibenzo(a,h)anthracene	--	1.4E-08
Dichlorobenzene	--	1.4E-05
Fluoranthene	--	3.5E-08
Fluorene	--	3.3E-08
Formaldehyde	--	8.9E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	2.1E-08
Naphthalene	--	7.2E-06
Phenanthrene	--	2.0E-07
Pyrene	--	5.9E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	--	4.0E-05
Arsenic	--	2.4E-06
Beryllium	--	1.4E-07
Cadmium	--	1.3E-05
Chromium	--	1.7E-05
Cobalt	--	9.9E-07
Manganese	--	4.5E-06
Mercury	--	3.1E-06
Nickel	--	2.5E-05
Selenium	--	2.8E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and baghouse to be online when Kiln 1 is in operation
TP-7A-2C	Thermal		VOC	99	
TP-7A-3C	Baghouse		PM	99	

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-7A-P	Kiln 1	8,000	35,040

[45CSR13 - Permit R13-2532]

14.1.13. Emission Points TP-7A-P — Kiln 1 Exhaust Controls. The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532]

14.1.15. Emission Points TP-7A-P and TP-8A-P — Kiln Exhaust Emissions. Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Max. Pollutant Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.80	2.46
Nitrogen Oxides (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic	0.80	3.55

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532, Condition 5.1.20.]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shutdown when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.
- g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.4. Commencement of operation. The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.

[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. Proper Maintenance — At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. Continued Operation — Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. Documentation of Need for Improved Monitoring — After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. Excursions — an excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

14.2.10. Quality Improvement Plan (QIP) — Based on the results of a determination made under 40 CFR §64.7(d)(2) (permit condition 14.2.9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

14.5.2. General reporting requirements for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-7B-P	Emission unit name: Rotary Kiln 1 Burners	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary kiln will be indirectly heated by four 0.5 MMBtu/hr natural gas burners. The burners associated with each kiln will have their own exhaust stack to atmosphere, separate from the exhaust from the kilns themselves.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.0 MMBtu/hr	Type and Btu/hr rating of burners: 4 Burners at 0.5 MMBtu/hr each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,031
Carbon Monoxide (CO)	--	0.72
Nitrogen Oxides (NO _x)	--	0.86
Lead (Pb)	--	4.3E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.07
Total Particulate Matter (TSP)	--	0.07
Sulfur Dioxide (SO ₂)	--	5.2E-03
Volatile Organic Compounds (VOC)	--	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.1E-07
3-Methylchloranthrene	--	1.5E-08
7,12-Dimethylbenz(a)anthracene	--	1.4E-07
Acenaphthene	--	1.5E-08
Acenaphthylene	--	1.5E-08
Anthracene	--	2.1E-08
Benzene	--	1.8E-05
Benzo(a)anthracene	--	1.5E-08
Benzo(a)pyrene	--	1.0E-08
Benzo(b)fluoranthene	--	1.5E-08
Benzo(g,h,i)perylene	--	1.0E-08
Benzo(k)fluoranthene	--	1.5E-08
Chrysene	--	1.5E-08
Dibenzo(a,h)anthracene	--	1.0E-08
Dichlorobenzene	--	1.0E-05
Fluoranthene	--	2.6E-08
Fluorene	--	2.4E-08
Formaldehyde	--	6.4E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	1.5E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	5.2E-06
Phenanthrene	--	1.5E-07
Pyrene	--	4.3E-08
Toluene	--	2.9E-05
Arsenic	--	1.7E-06
Beryllium	--	1.0E-07
Cadmium	--	9.4E-06
Chromium	--	1.2E-05
Cobalt	--	7.2E-07
Manganese	--	3.3E-06
Mercury	--	2.2E-06
Nickel	--	1.8E-05
Selenium	--	2.1E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2.0

[45CSR13 - Permit R13-2532]

14.1.12. Emission Points TP-7B-P and TP-8B-P — Kiln Burners — NG Combustion Emissions. Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.20	0.86
Carbon Monoxide (CO)	0.17	0.72

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-8A-P	Emission unit name: Rotary Borings Kiln 2	List any control devices associated with this emission unit: TP-8A-1C, Cyclone TP-8A-2C, Thermal Oxidizer TP-8A-3C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary burn-off kiln heats the scrap metal to vaporize any oils and water present. The clean and dry scrap metal will exit from one end of the rotary kiln while the hot exhaust gases containing vaporized oils and water will exit the kiln at the other end. After exiting the kiln, these exhaust gases will be heated to above 600 °F in a smoke hood in order to prevent condensation of volatilized oils in the ducting system. The smoke hood will provide direct heat to the exhaust stream via a 0.75 MMBtu/hr natural gas burner.

Manufacturer: EnviroAir Inc. (CORECO)	Model number: Model BD-60	Serial number:
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Construction date: 2011	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Dirty scrap metal: 8,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: Smoke Hood at 0.75 MMBtu/hr	Type and Btu/hr rating of burners: Smoke Hood: one burner rated at 0.75 MMBtu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,417
Carbon Monoxide (CO)	--	0.99
Nitrogen Oxides (NO _x)	--	1.20
Lead (Pb)	--	5.9E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)	--	7.1E-03
Volatile Organic Compounds (VOC)	--	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.8E-07
3-Methylchloranthrene	--	2.1E-08
7,12-Dimethylbenz(a)anthracene	--	1.9E-07
Acenaphthene	--	2.1E-08
Acenaphthylene	--	2.1E-08
Anthracene	--	2.8E-08
Benzene	--	2.5E-05
Benzo(a)anthracene	--	2.1E-08
Benzo(a)pyrene	--	1.4E-08
Benzo(b)fluoranthene	--	2.1E-08
Benzo(g,h,i)perylene	--	1.4E-08
Benzo(k)fluoranthene	--	2.1E-08
Chrysene	--	2.1E-08
Dibenzo(a,h)anthracene	--	1.4E-08
Dichlorobenzene	--	1.4E-05
Fluoranthene	--	3.5E-08
Fluorene	--	3.3E-08
Formaldehyde	--	8.9E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	2.1E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	7.2E-06
Phenanthrene	--	2.0E-07
Pyrene	--	5.9E-08
Toluene	--	4.0E-05
Arsenic	--	2.4E-06
Beryllium	--	1.4E-07
Cadmium	--	1.3E-05
Chromium	--	1.7E-05
Cobalt	--	9.9E-07
Manganese	--	4.5E-06
Mercury	--	3.1E-06
Nickel	--	2.5E-05
Selenium	--	2.8E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal		VOC	99	
TP-8A-3C	Baghouse		PM	99	

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-8A-P	Kiln 2	8,000	35,040

[45CSR13 - Permit R13-2532]

14.1.14. Emission Points TP-8A-P — Kiln 2 Exhaust Controls. The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532]

14.1.15. Emission Points TP-7A-P and TP-8A-P — Kiln Exhaust Emissions. Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Max. Pollutant Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.80	2.46
Nitrogen Oxides (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic	0.80	3.55

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532, Condition 5.1.20.]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.

b. Each kiln system will be programmed to automatically shutdown when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.

c. The temperature will be measured continuously.

d. The temperature shall be continuously recorded electronically.

e. The temperature readings shall be checked daily to confirm status of monitoring.

f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.4. Commencement of operation. The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.
[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. Proper Maintenance — At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. Continued Operation — Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. Documentation of Need for Improved Monitoring — After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. Excursions — an excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

14.2.10. Quality Improvement Plan (QIP) — Based on the results of a determination made under 40 CFR §64.7(d)(2) (permit condition 14.2.9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented. [40 CFR § 64.8; 45CSR§30-5.1.c.]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed. [45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems. [45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

14.5.2. General reporting requirements for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-8B-P	Emission unit name: Rotary Kiln 2 Burners	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary kiln will be indirectly heated by four 0.5 MMBtu/hr natural gas burners. The burners associated with each kiln will have their own exhaust stack to atmosphere, separate from the exhaust from the kilns themselves.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2.0 MM Btu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.0 MMBtu/hr	Type and Btu/hr rating of burners: 4 Burners at 0.5 MMBtu/hr each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,031
Carbon Monoxide (CO)	--	0.72
Nitrogen Oxides (NO _x)	--	0.86
Lead (Pb)	--	4.3E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.07
Total Particulate Matter (TSP)	--	0.07
Sulfur Dioxide (SO ₂)	--	5.2E-03
Volatile Organic Compounds (VOC)	--	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.1E-07
3-Methylchloranthrene	--	1.5E-08
7,12-Dimethylbenz(a)anthracene	--	1.4E-07
Acenaphthene	--	1.5E-08
Acenaphthylene	--	1.5E-08
Anthracene	--	2.1E-08
Benzene	--	1.8E-05
Benzo(a)anthracene	--	1.5E-08
Benzo(a)pyrene	--	1.0E-08
Benzo(b)fluoranthene	--	1.5E-08
Benzo(g,h,i)perylene	--	1.0E-08
Benzo(k)fluoranthene	--	1.5E-08
Chrysene	--	1.5E-08
Dibenzo(a,h)anthracene	--	1.0E-08
Dichlorobenzene	--	1.0E-05
Fluoranthene	--	2.6E-08
Fluorene	--	2.4E-08
Formaldehyde	--	6.4E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	1.5E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	5.2E-06
Phenanthrene	--	1.5E-07
Pyrene	--	4.3E-08
Toluene	--	2.9E-05
Arsenic	--	1.7E-06
Beryllium	--	1.0E-07
Cadmium	--	9.4E-06
Chromium	--	1.2E-05
Cobalt	--	7.2E-07
Manganese	--	3.3E-06
Mercury	--	2.2E-06
Nickel	--	1.8E-05
Selenium	--	2.1E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2.0

[45CSR13 - Permit R13-2532]

14.1.12. Emission Points TP-7B-P and TP-8B-P — Kiln Burners — NG Combustion Emissions. Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.20	0.86
Carbon Monoxide (CO)	0.17	0.72

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-9-P	Emission unit name: Crusher	List any control devices associated with this emission unit: TP-9-C, Electrostatic Precipitator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the metal will be reduced into chips by the crusher.

Manufacturer: American Pulverizer	Model number: 380-HD	Serial number: 8416
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Construction date: 2011	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Metal scrap: 7,040 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.30
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.56
Nickel	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation.

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-9-P	Scrap Metal Crusher	7,040	8,975

[45CSR13 - Permit R13-2532]

14.1.5. Emission Point (TP-9-S) – Crusher PM Controls. The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

14.1.6. Emission Point (TP-9-S) – Crusher PM Emissions. The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	1.75	2.20
Hazardous Air Pollutants	1.49	1.90

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-10-P	Emission unit name: Shot/Tumbler Blaster	List any control devices associated with this emission unit: TP-10-C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycle process, if needed, the scrap metal will be cleaned by the shot blaster which will remove any surface of oxides or surface impurities.

Manufacturer: Wheelabrator	Model number: GN34	Serial number:
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Construction date: 2015	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Metal Scrap: 15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.05
Total Particulate Matter (TSP)	--	0.05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	2.4E-03
Nickel	--	5.8E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Emission factor from data collected at another Special Metals facility.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-10-P	Shot/ Tumble Blaster	15,000	3,000

[45CSR13 - Permit R13-2532]

14.1.10. Emission Point TP-10-P – Shot Blaster PM Controls. The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532]

14.1.11. Emission Point TP-10-P – Shot Blast PM Emissions. Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants	0.04	0.01

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-11-P	Emission unit name: Wash Water Burner	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the quantity of dirt, oil, and grease introduced into the kilns along with the scrap metal, a raw material wash system cleans the metal. The wash water is heated before use by natural gas burners. This burner has a separate exhaust stack.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.83 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 0.83 MMBtu/hr	Type and Btu/hr rating of burners: Eclipse IJ-II high efficiency (>80%) nozzle mixing power burner (0.83 MMBtu/hr).
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	428
Carbon Monoxide (CO)	--	0.30
Nitrogen Oxides (NO _x)	--	0.36
Lead (Pb)	--	1.8E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)	--	2.1E-03
Volatile Organic Compounds (VOC)	--	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	8.6E-08
3-Methylchloranthrene	--	6.4E-09
7,12-Dimethylbenz(a)anthracene	--	5.7E-08
Acenaphthene	--	6.4E-09
Acenaphthylene	--	6.4E-09
Anthracene	--	8.6E-09
Benzene	--	7.5E-06
Benzo(a)anthracene	--	6.4E-09
Benzo(a)pyrene	--	4.3E-09
Benzo(b)fluoranthene	--	6.4E-09
Benzo(g,h,i)perylene	--	4.3E-09
Benzo(k)fluoranthene	--	6.4E-09
Chrysene	--	6.4E-09
Dibenzo(a,h)anthracene	--	4.3E-09
Dichlorobenzene	--	4.3E-06
Fluoranthene	--	1.1E-08
Fluorene	--	1.0E-08
Formaldehyde	--	2.7E-04
Hexane	--	6.4E-03
Indenol(1,2,3,c,d)pyrene	--	6.4E-09

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	2.2E-06
Phenanthrene	--	6.1E-08
Pyrene	--	1.8E-08
Toluene	--	1.2E-05
Arsenic	--	7.1E-07
Beryllium	--	4.3E-08
Cadmium	--	3.9E-06
Chromium	--	5.0E-06
Cobalt	--	3.0E-07
Manganese	--	1.4E-06
Mercury	--	9.3E-07
Nickel	--	7.5E-06
Selenium	--	8.6E-08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-11-P	TP-11-S	Wash Water Burner	0.83

[45CSR13 - Permit R13-2532]

14.1.8. Emission Point (TP-11-S) - Water Wash Burner — NG Combustion Emissions. Emission point (TP-11-S) associated with the Water Wash Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.30

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-12-P	Emission unit name: Rinse Water Burner	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the quantity of dirt, oil, and grease introduced into the kilns along with the scrap metal, a raw material wash and rinse system cleans the metal. The rinse water is heated before use by natural gas burners. This burner has a separate exhaust stack.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.44 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 0.44 MMBtu/hr	Type and Btu/hr rating of burners: Eclipse IJ-II high efficiency (>80%) nozzle mixing power burner (0.44 MMBtu/hr).
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	227
Carbon Monoxide (CO)	--	0.16
Nitrogen Oxides (NO _x)	--	0.19
Lead (Pb)	--	9.4E-07
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)	--	1.1E-03
Volatile Organic Compounds (VOC)	--	0.01
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	4.5E-08
3-Methylchloranthrene	--	3.4E-09
7,12-Dimethylbenz(a)anthracene	--	3.0E-08
Acenaphthene	--	3.4E-09
Acenaphthylene	--	3.4E-09
Anthracene	--	4.5E-09
Benzene	--	4.0E-06
Benzo(a)anthracene	--	3.4E-09
Benzo(a)pyrene	--	2.3E-09
Benzo(b)fluoranthene	--	3.4E-09
Benzo(g,h,i)perylene	--	2.3E-09
Benzo(k)fluoranthene	--	3.4E-09
Chrysene	--	3.4E-09
Dibenzo(a,h)anthracene	--	2.3E-09
Dichlorobenzene	--	2.3E-06
Fluoranthene	--	5.7E-09
Fluorene	--	5.3E-09
Formaldehyde	--	1.4E-04
Hexane	--	3.4E-03
Indenol(1,2,3,c,d)pyrene	--	3.4E-09

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.2E-06
Phenanthrene	--	3.2E-08
Pyrene	--	9.4E-09
Toluene	--	6.4E-06
Arsenic	--	3.8E-07
Beryllium	--	2.3E-08
Cadmium	--	2.1E-06
Chromium	--	2.6E-06
Cobalt	--	1.6E-07
Manganese	--	7.2E-07
Mercury	--	4.9E-07
Nickel	--	4.0E-06
Selenium	--	4.5E-08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-12-P	TP-12-S	Rinse Water Burner	0.44

[45CSR13 - Permit R13-2532]

14.1.9. Emission Point (TP-12-S) - Rinse Water Burner — NG Combustion Emissions. Emission point (TP-12-S) associated with the Rinse Wash Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-13-P	Emission unit name: Arc Cutter 3	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2013	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 3 (TP-13-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-13-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-15-P	Emission unit name: Arc Cutter 4	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 4 (TP-15-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-15-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-16-P	Emission unit name: Arc Cutter 5	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 5 (TP-16-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-16-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-19-P	Emission unit name: Viking Belt Blaster	List any control devices associated with this emission unit: TP-19-C Internal Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 In the scrap metal recycle process, if needed, the scrap metal will be cleaned by the belt blaster which will remove any surface of oxides or surface impurities.

Manufacturer: Viking	Model number: 600	Serial number:
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Construction date: 2015	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Metal Scrap: 600 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.05	0.19
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	0.01	0.0025
Nickel	0.024	0.006
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emissions Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-19-C	Internal Baghouse	Belt Blaster	PM	99.9	Baghouse to be online when Blaster in Operation

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lbs/hr)	(ton/yr)
TP-19-P	Viking Belt Blaster	600	109.5

[45CSR13 - Permit R13-2532]

14.1.10. Emission Point TP-19-P — Viking Belt Blaster PM Controls. The Baghouse (Control Device TP-19-C) shall be online and good operating condition at all times during the operation of the Belt Blaster (Emission Unit TP-19-P).

[45CSR13 - Permit R13-2532]

14.1.11. Emission Point TP-19-P — Belt Blaster PM Emissions. Emission point (TP-19-S) associated with the Viking Belt Blaster (Emission Unit TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter	0.05	0.19
Hazardous Air Pollutants	0.04	0.01

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Belt Blaster, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Belt Blaster, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

- b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.
- c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.
- d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.
- e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.
- g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.
[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VM-2-P	Emission unit name: VIM Mold Preheat	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Vacuum Induction Melting Department, used in the preheating process of rolls. Vents to inside air.

Manufacturer: Electric Furnace	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 5,714 SCFH	Type and Btu/hr rating of burners: 6,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 – R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VM-5-P	Emission unit name: Tundish Drying Oven	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to preheat vessels prior to using with molten alloys.

Manufacturer: Electric Oven	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 1,429 SCFH	Type and Btu/hr rating of burners: 1,500,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

Attachment F
Schedule of Compliance

Schedule of Compliance

The facility is in compliance with all applicable requirements; therefore, a Schedule of Compliance Form is not provided.

Attachment G
Control Devices

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: BW-10-C	List all emission units associated with this control device. BW-10-P, Bar & Wire Mill Scholle Saw
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Manufacturer: Wheelabrator Corp.Uni-Wash, Inc.	Model number: 108-6P	Installation date: MM/DD/2005 Moved
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input checked="" type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & Metals		99.5 %

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

4300 CFM @ 11" SP; 1142 SQ. Ft. Cloth 81 Bags 6" X 108"; 285 Degree F Max. Temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Saw installed before 1970.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: BW-11-C	List all emission units associated with this control device. BW-11-P
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Manufacturer:	Model number:	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-17-C	List all emission units associated with this control device. CD-17-P, East Cutters (3 saws)
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Manufacturer:	Model number:	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-23-C	List all emission units associated with this control device. CD-23-P, CD West Cutters Baghouse
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Manufacturer: Floair	Model number:	Installation date: 1970
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM-Metals		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2919 CFM @ 12.5" S.P.; Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CD-23-P, CD West Cutters Baghouse, is exempt from 45CSR 7-4.1 and is not subject to an emission limit per WVDEP 2008 Fact Sheet.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-36-C	List all emission units associated with this control device. CD-36-P Cold Draw Hard Chrome Plating
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Manufacturer: Vanaire, Inc.	Model number: CH-7321 Chromax R	Installation date: 04/30/1993
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Metals Cr ⁺⁶	100%	

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The Vanaire Chromax chrome removal scrubber is engineered specifically to meet the California emission standard for chrome of 0.006 mg/amp-hr.
 Average flow rate 5940 ft³/min; Maximum flow rate 6279 ft³/min; Average pressure drop 3 inches.
 Scrubbing agent water, continuous make-up to reduce saturation.

The hard chrome plating process at our facility is a "small" hard chrome plating process according to EPA standards. Our maximum potential cumulative rectifier capacity of 5,880,000 amp-hrs/yr. is far below the 60,000,000 amp-hrs/yr small source cutoff.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CD-36-P, Cold Draw Hard Chrome Plating, is subject to 40 C.F.R. Part 63, Subpart N, Chromium Electroplating MACT. This rule was proposed on 12/16/1993. Per 40 CFR 64.2(b)(i), CAM does not apply to emission limits proposed by EPA after 11/15/1990 pursuant to Clean Air Act Section 112 (MACT).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop across the composite mesh-pad system is monitored and recorded each day the process is operating.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-38-C	List all emission units associated with this control device. CD-38-P, Fugitive Ammonia Fumes from West Pickle Tank #11
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Manufacturer: HEIL® Process Equipment	Model number: 7311-SP	Installation date: MM/DD/2001
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Ammonium Sulfate (NH ₄) ₂ SO ₄	95%	98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow Rate 50,000 cfm; Average pressure drop 3 inches; Packing Size 3.5 inches' Packing Depth 10 feet; Scrubber Solution pH 2.0 SU Sulfuric Acid; Solution circulation rate 600 gpm;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** West Pickle Tank was installed in 1958.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-40-C	List all emission units associated with this control device. CD-40-P, Centro-Metalcut Type CAC 1220 Abrasive Saw
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Manufacturer: Agent Manufacturing	Model number: FT88-D1 (baghouse) 80SN70-D2 (cyclone)	Installation date: MM/DD/2010
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Cyclone: 28" length, 36" diameter, 6,000 acfm max at 68°F and 14.7 psia

Baghouse: mechanical shaker, 88 bags (5" diameter x 7.5' length), 842 ft² total cloth area, 5.93:1 air to cloth ratio, 5,000 acfm max at 68°F and 14.7 psia

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

Visually inspect control device every 3 months.

Visually inspect baghouse exterior and interior bags for leaks or failure every 30 calendar days.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-1-C	List all emission units associated with this control device. CS-1-P, Schluter Grinder
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Manufacturer: W. W.Sly	Model number: 51-360	Installation date: MM/DD/1964
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-2-C	List all emission units associated with this control device. CS-2-P, Norton Grinder
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Manufacturer: W. W.Sly	Model number: 51-360	Installation date: MM/DD/1964
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-3-C	List all emission units associated with this control device. CS-3-P, #1 Centro-Maskin Grinder
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Manufacturer: W. W. Sly	Model number: 51-360	Installation date: MM/DD/1966
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-4-C	List all emission units associated with this control device. CS-4-P, #2 Centro-Maskin Grinder
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Manufacturer: W. W. Sly	Model number: 51-360	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-1-C1	List all emission units associated with this control device. MS-1D, #4 EAF MS-1B, #5 EAF MS-1A, AOD Reactor MS-1E-P, Wire Feeder
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Manufacturer: Wheelabrator	Model number: 366	Installation date: MM/DD/1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

175,000 cfm; 6" W.C. pressure drop; Reverse Air Cleaning; 864 bags, 11.5" dia. x 30.5 ft. lg.; 79,488 sq. ft. cloth area; air-to-cloth 2.2; 180 deg. F max. temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-1-C2	List all emission units associated with this control device. MS-1D, #4 EAF MS-1B, #5 EAF MS-1A, AOD Reactor MS-1E-P, Wire Feeder
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Manufacturer: Wheelabrator	Model number: 168 Jet III	Installation date: MM/DD/1999
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99.7%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

350,000 cfm; 8" W.C. pressure drop; Pulse Jet Cleaning; 4,104 bags, 6" dia. x 14 ft. lg.; 93,648 sq. ft. cloth area; air-to-cloth 3.75; 180 deg. F temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-2-C	List all emission units associated with this control device. MS-2, Powder Torch
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Manufacturer: Wheelabrator Canada Inc.	Model number: 168 TA-SB, Series 6P	Installation date: MM /DD/1997
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Metal Oxide Fume		1.0 gr/dscf emissions

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow rate 70,000 ACFM; 765 bags; 6" dia. x 168" long; 215°F Max Temp; 4.01 Air to Cloth Ratio

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-9-C	List all emission units associated with this control device. MS-9-P, Lime Storage Silo
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Manufacturer: Carborundum	Model number: 300 CN 2	Installation date: MM/DD/1975
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

1,200 cfm rated ; Shaker Cleaning; 300 sq. ft. cloth area; air-to-cloth 4; ambient temp.; physical size 4 ft x 4 ft x 6 ft ht.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-4-C	List all emission units associated with this control device. PM-4-P, PMD Grit Blaster Machine
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Manufacturer: Pangbourne	Model number: 126 D	Installation date: 1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM-Metals		95.5%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

5880 CFM @ 6" S.P.; 168 Bags x 5" Dia x 126"; Ambient Air

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Pre-controlled potential PM emissions are less than 100 tons per year.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-5-C	List all emission units associated with this control device. PM-5-P, Southeast Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
PM-6-C & PM-25-C

List all emission units associated with this control device.
PM-25-P, Southcentral Grinder
PM-6-P, Southwest grinder

Manufacturer:
Pangborn Corp.

Model number:
C150

Installation date:
MM/DD/1967

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-7-C	List all emission units associated with this control device. PM-7-P, Northeast Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-8A-C	List all emission units associated with this control device. PM-8-P, North-West Grinder
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Manufacturer: Mikropul	Model number: 144-12-20 TRMC	Installation date: 08/01/2008
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM (Nickel alloy dust)		>98%
PM (Titanium dust)		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

20,000 ACFM @ 4.5" SP; 144 bags per section; four sections total, three active sections, one cleaning section; Cloth area/section 8144ft² ; Temp. <100°F; Pulse Jet continuous cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit Installed before 1966

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-8B-C	List all emission units associated with this control device. PM-8-P, North-West Grinder
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Manufacturer: U.S. Air Filtration	Model number: 1010-WPT-144-6	Installation date: 08/15/2008
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM (Nickel alloy dust)		>98%
PM (Titanium dust)		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

12,500 cfm @ 5" max S.P. ΔP across bags, Pulse jet , 275 °F maximum operating temperature
 Fan ratio @ 12,500 cfm @ 20" S.P. W.G.
 Total 300 bags (6" x 144") for total cloth (16 oz polyester)
 Area = 5,655 sq ft, 2.21:1 air to cloth ratio

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit Installed before 1966.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-20-C	List all emission units associated with this control device. PM-20-P, PM Plate Plasma Torch
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Manufacturer: American Air Filter	Model number: Model 2	Installation date: 10/15/1989
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dust collector system consists of two hoods which collect the particulate produced from the process operation.
 Flow rate 3600 ft³/min; Average pressure drop 5 inches;
 2.25" X 6' Polyester Bags; Air to cloth ratio 4; filtering area 900 ft²; Pulse Jet cleaning method;
 Temperature is ambient.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-26-C	List all emission units associated with this control device. PM-26-P, North-Central Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft² ; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SC-2-C	List all emission units associated with this control device. SC-2-P, Service Center Saw
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Manufacturer: Uni-Wash, Inc.	Model number: MM-4000	Installation date: MM/DD/1970
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber (Mist)	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Fan 2,000CFM @ 10" SP; Drop-out Box by Airpro; Metal Mesh 24" X 24" X 1" Pre-filter; VEE Bag 10 Pocket Filter — 95% Collapsible Borosilicate Glass; 4" Mist Eliminator Pack

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Saw installed before 1970.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-1-C	List all emission units associated with this control device. SM-1-P, Continuous Anneal & Pickle Line (CAP)
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Manufacturer: HEIL® Process Equipment	Model number: 738	Installation date: 10/01/1984
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Mist Eliminator</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Acid Mist		95% of Mist / 99% Fumes

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow Rate 23,200 cfm; Pressure drop 3 inches; Packing Size 2 inches; Packing Depth 5.5 feet; Scrubber Solution Water; Solution circulation rate 350 gpm;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CAP Line Emissions Unit was installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-2-C	List all emission units associated with this control device. SM-2-P, CAP Line Shot Blaster
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Manufacturer: American Air Filter	Model number: Type N Size 46	Installation date: 1966
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM- Metals		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

11,000 CFM @ 2.8" S.P. Rotoclone Wet Scrubber. Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

Water level and fan operation monitored continuously. Water level switch checked quarterly and fan operation monitor checked daily.

Daily and monthly inspection of scrubber system in accordance with P/M checklist.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-3-C	List all emission units associated with this control device. SM-3-P, MKW Rolling Mill
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Manufacturer: American Air Filter	Model number: Rotoclone 1656297-7	Installation date: 1967
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

24" Rotoclone with 20 horsepower, 1775 RPM Motor. Ambient Air Temp

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-10-C	List all emission units associated with this control device. SM-10-P, Strip Mill #2 CBU Grinder
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Manufacturer: Dracco-Fuller	Model number: Mark II	Installation date: 1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM- Metals		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

9,000 CFM @ 14" S.P. Fan; 3.5" Delta P Max; 56 Bags x 139"

(Returns filtered air to building on outdoors MR 2144) W1damper control

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** SM-10-P, Strip Mill #2 CBU Grinder, is exempt from 45CSR 7-4.1 and is not subject to an emission limit per WVDEP 2008 Fact Sheet.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:

TP-7A-1C,
Cyclone for Kiln 1

List all emission units associated with this control device.

TP-7A-P , Rotary Borings Kiln 1

Manufacturer:

EnviroAir Inc.

Model number:

Unknown

Installation date:

MM/DD/2011

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input checked="" type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dry cyclone
3,000 acfm at 350 °F

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Cyclone will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:

 TP-7A-2C
 Thermal Oxidizer for Kiln 1

List all emission units associated with this control device.

TP-7A-P, Rotary Borings Kiln 1

Manufacturer:

 Enviro Air, Inc. thermal oxidizer,
 Maxon Kinemax Burner

Model number:

Unknown

Installation date:

MM/DD/2011

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input checked="" type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2.0 MM Btu/hr natural gas burner
 Typical combustion chamber temperature approximately 1,400 °F
 Minimum combustion chamber retention time of 0.6 seconds.
 Maximum loading of 80 lbs/hr of organics.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
 Continuous measurement and recording of temperature. Temperature checked daily.
 Annual validation of accuracy of thermocouple.
 Shutdown of the kiln system if it operates below 1,200 °F for 60 minutes or more

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-7A-3C Baghouse for Kiln 1	List all emission units associated with this control device. TP-7A-P, Rotary Borings Kiln 1
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Manufacturer: Donaldson Dalamatic	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm gas flow at 350 °F and -0.72 psia
 Pulse jet, 645 ft² total cloth area

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse exterior and interior bags will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-1C, Cyclone for Kiln 2	List all emission units associated with this control device. TP-8A-P , Rotary Borings Kiln 2
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Manufacturer: EnviroAir Inc.	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dry cyclone
 3,000 acfm at 350 °F

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Cyclone will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-2C Thermal Oxidizer for Kiln 2	List all emission units associated with this control device. TP-8A-P, Rotary Borings Kiln 2
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Manufacturer: Enviro Air, Inc. thermal oxidizer, Maxon Kinemax Burner	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2.0 MMBtu/hr natural gas burner
 Typical combustion chamber temperature approximately 1,400 °F
 Minimum combustion chamber retention time of 0.6 seconds.
 Maximum loading of 80 lbs/hr of organics.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.
 If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
 Continuous measurement and recording of temperature. Temperature checked daily.
 Annual validation of accuracy of thermocouple.
 Shutdown of the kiln system if it operates below 1,200 °F for 60 minutes or more.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-3C Baghouse for Kiln 2	List all emission units associated with this control device. TP-8A-P, Rotary Borings Kiln 2
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Manufacturer: Donaldson Dalamatric	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm gas flow at 350 °F and -0.72 psia
 Pulse jet, 645 ft² total cloth area

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-9-C Electrostatic Precipitator	List all emission units associated with this control device. TP-9-P, Crusher
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Manufacturer: Horizon International	Model number: SEM.132	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input checked="" type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		88.3%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,200 acfm flow rate, 6 feet/second velocity, 0.4 in H₂O pressure drop
 12 Flat plate electrodes, 5 ft verticle height, and 1,560 ft² active collecting surface
 Manual plate cleaning system

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

ESP will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-10-C	List all emission units associated with this control device. TP-1-P, Tumble Blaster (Thistle Processing) TP-6-P, Cabinet Blaster (Thistle Processing) TP-10-P, Shot/Tumble Blaster (Scrap Metal Recycling)
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Manufacturer: Donaldson Dalamatric	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm at 350 °F and -0.72 psia
 Closed suction, Pulse jet, Total cloth area of 645 ft²

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Differential pressure controller will be monitored.

Baghouse exterior and interior bags will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-19-C Internal Baghouse	List all emission units associated with this control device. TP-19-P Viking Belt Blaster
---	--

Manufacturer: Viking	Model number: 9-PDC	Installation date: MM/DD/2016
--------------------------------	-------------------------------	---

Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Closed suction, filter cartridge and Pulse jet
 Air consumption is 1.2cubic ft per min @90psi

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

Attachment H
Compliance Assurance Monitoring Forms

Attachment H

Compliance Assurance Monitoring

The facility currently has approved compliance assurance (CAM) plans for the following control devices:

- Rotary Borings Kiln 1 Thermal Oxidizer (TP-7A-2C)
- Rotary Borings Kiln 2 Thermal Oxidizer (TP-8A-2C)
- Strip Mill Wet Scrubber (SM-2-C)
- Melt Shop Baghouses (MS-1-C1, MS-1-C2, MS-2-C)

Since CAM does not apply to any other control devices, no CAM forms have been provided.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Fwd: Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application, R30-01100007

1 message

Air Quality Permitting, DEP <depairqualitypermitting@wv.gov>

Thu, May 25, 2023 at 3:38 PM

To: Stephanie R Mink <stephanie.r.mink@wv.gov>, Daniel P Roberts <daniel.p.roberts@wv.gov>

Stephanie,

Please assign this renewal application to Dan as R30-01100007-2023.

Thanks,
Carrie

----- Forwarded message -----

From: **Felty, Roger** <Roger.Felty@arcadis.com>

Date: Thu, May 25, 2023 at 3:32 PM

Subject: Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application, R30-01100007

To: DEPAirQualityPermitting@wv.gov <DEPAirQualityPermitting@wv.gov>Cc: Dan Roberts <daniel.p.roberts@wv.gov>, Tom Bell <tom.bell@specialmetals.com>, mporter@specialmetals.com <mporter@specialmetals.com>, Patton, Kevin <Kevin.Patton@arcadis.com>, Rota, Casey <Casey.Rota@arcadis.com>, Uhall, Justin <Justin.Uhall@arcadis.com>

To Whom it May Concern:

Attached please find the application for renewal of the Huntington Alloys Corporation Title V air permit.

Also attached is the email cover letter as required by WVDEP.

If you have any questions on the renewal package, please contact Tom Bell (tom.bell@specialmetals.com, 304-526-5228) or Roger Felty (roger.felty@arcadis.com, 720-409-0288)

Thank you,

Roger Felty

Roger Felty

Principal Air Quality Consultant

Arcadis U.S., Inc.

T +1 720 409 0288

roger.felty@arcadis.comwww.arcadis.com



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3 attachments



Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

• **Type of NSR Application (check all that apply):**

- Construction
- Modification
- Class I Administrative Update
- Class II Administrative Update
- Relocation
- Temporary
- Permit Determination

• **Type of 45CSR30 (TITLE V) Application:**

- Title V Initial
- Title V Renewal
- Administrative Amendment**
- Minor Modification**
- Significant Modification**
- Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENTS to the combined NSR/Title V application.**

• **Payment Type:**

- Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

• **If the permit writer has any questions, please contact (all that apply):**

Responsible Official/Authorized Representative

- **Name:**
- **Email:**
- **Phone Number:**

Company Contact

- **Name:**
- **Email:**
- **Phone Number:**

Consultant

- **Name:**
- **Email:**
- **Phone Number:**



3200 Riverside Dr.

Huntington, WV 25705-1771 U.S.A.
(304) 526-5228 Fax:(304) 526-5437
www.specialmetals.com

Tom Bell
Environmental Manager

May 25, 2023

Laura Crowder
Director
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Dear Ms. Crowder,

Please find enclosed the Huntington Alloys Corporation Title V renewal application. The renewal has been completed per the renewal application requirements under section 4.3 of 45CSR30.

If you should have any questions or require further information please do not hesitate to contact me at (304) 526-5259.

Sincerely,

A handwritten signature in blue ink that reads "Tom Bell". The signature is written in a cursive style with a large, looped "B" and a long, sweeping underline.

Tom Bell
Environmental Manger

Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

• DAQ Facility ID (for existing facilities only):

• Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

• Type of NSR Application (check all that apply):

- Construction
- Modification
- Class I Administrative Update
- Class II Administrative Update
- Relocation
- Temporary
- Permit Determination

• Type of 45CSR30 (TITLE V) Application:

- Title V Initial
- Title V Renewal
- Administrative Amendment**
- Minor Modification**
- Significant Modification**
- Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

• Payment Type:

- Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

• If the permit writer has any questions, please contact (all that apply):

Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

Company Contact

- Name:
- Email:
- Phone Number:

Consultant

- Name:
- Email:
- Phone Number:



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE

Charleston, WV 25304

Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. Name of Applicant (As registered with the WV Secretary of State’s Office): Huntington Alloys Corporation	2. Facility Name or Location: Huntington Alloys Corporation Huntington WV Facility
3. DAQ Plant ID No.: 011— 00007	4. Federal Employer ID No. (FEIN): 55 - 0785766
5. Permit Application Type: <input type="checkbox"/> Initial Permit When did operations commence? <input checked="" type="checkbox"/> Permit Renewal What is the expiration date of the existing permit? 11/27/2023 <input type="checkbox"/> Update to Initial/Renewal Permit Application	
6. Type of Business Entity: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Governmental Agency <input type="checkbox"/> LLC <input type="checkbox"/> Partnership <input type="checkbox"/> Limited Partnership	7. Is the Applicant the: <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both If the Applicant is not both the owner and operator, please provide the name and address of the other party.
8. Number of onsite employees: 940	
9. Governmental Code: <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> District government owned and operated; 5	
10. Business Confidentiality Claims Does this application include confidential information (per 45CSR31)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance.	

11. Mailing Address		
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: (304) 526-5100	Fax Number:	

12. Facility Location (Physical Address)		
Street: 3200 Riverside Drive	City: Huntington	County: Cabell
UTM Easting: 379.20 km	UTM Northing: 4,252.30 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions:		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Ohio Kentucky	
Is facility located within 100 km of a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Jay Khetani		Title: General Manager
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: 304-526-5100	Cell Number:	
E-mail address: jkhetani@precastcorp.com		
Environmental Contact: Tom Bell		Title: Environmental Manager
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: 304-526-5228	Cell Number:	
E-mail address: tom.bell@specialmetals.com		
Application Preparer: Roger Felty		Title: Principal Air Quality Consultant
Company: Arcadis U.S., Inc.		
Street or P.O. Box: 630 Plaza Drive, Suite 200		
City: Highlands Ranch	State: CO	Zip: 80129
Telephone Number: 720-409-0288	Cell Number:	
E-mail address: roger.felty@arcadis.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Huntington Alloys Corp. is a nickel manufacturing facility. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty (120) different alloys.	Huntington Alloys Corp. melting facilities and rolling mills are devoted exclusively to the production of wrought nickel and high nickel alloy products.	33149	3356

Provide a general description of operations.

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> Cross-State Air Pollution Rule (45CSR43)	

19. Non Applicability Determinations
<p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>40CFR Part 60 subpart Dc - New Source Performance Standards (NSPS) for Small Industrial Steam Generating Units. The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 MMBtu/hr.</p> <p>40CFR Part 60 subpart K - New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).</p>
<p><input checked="" type="checkbox"/> Permit Shield</p>

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

40 CFR 60 Subpart Ka - New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).

40 CFR 60 Subpart Kb - New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR§ 60.110b(b).

40 CFR Part 60 Subparts AA and AAa - New Source Performance Standards (NSPS) for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983. The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and AOR vessel were installed in 1966, 1971, and 1971 respectively, before the applicability date of this regulation (October 21, 1974). Therefore, this regulation is not applicable to the facility.

40 CFR Part 63 - Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling- HCl Process Facilities and Hydrochloric Acid Regeneration Plants. This standard is not applicable to facilities that pickle specialty steel. Specialty Steel means a category of steel that includes silicon electrical, alloy and stainless steels.

40 CFR Part 63 – Subpart YYYYYY – National Emission Standard for Hazardous Air Pollutants for Area/Sources: Electric Arc Furnace Steelmaking Facilities. This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Open burning [45CSR§6-3.1.]

Open burning exemptions [45CSR§6-3.2.]

Asbestos [40 CFR 61 and 45CSR34]

Odor [45CSR§4-3.1 State-Enforceable only.]

Standby plan for reducing emissions [45CSR§11-5.2]

Emission inventory [W.Va. Code § 22-5-4(a)(14)]

Ozone-depleting substances [40 C.F.R. 82, Subpart F]

Risk Management Plan [40 C.F.R. 68]

Fugitive Particulate [45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]



Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Odors. For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. [45CSR§30-5.1.c. State-Enforceable only.]

Fugitives. The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.[45CSR§30-5.1.c.]

Fugitives. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.[45CSR§30-5.1.c.]

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

21. Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-0137	03/24/1975	
R13-1165	11/03/1989	
R13-1646A	03/05/2015	
R13-1767	10/17/1994	
R13-2163A	12/20/2010	
R13-2532I	02/25/2016	

22. Inactive Permits/Obsolete Permit Conditions

Permit Number	Date of Issuance MM/DD/YYYY	Permit Condition Number

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	267.9
Nitrogen Oxides (NO _x)	314.6
Lead (Pb)	
Particulate Matter (PM _{2.5}) ¹	
Particulate Matter (PM ₁₀) ¹	130.9
Total Particulate Matter (TSP)	130.9
Sulfur Dioxide (SO ₂)	8.92
Volatile Organic Compounds (VOC)	51.0
Hazardous Air Pollutants ²	Potential Emissions
Nickel	27.2
Chromium	7.6
Hydrochloric Acid	3.9
Hexane	5.8
Regulated Pollutants other than Criteria and HAP	Potential Emissions

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input checked="" type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input checked="" type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input checked="" type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input checked="" type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input checked="" type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input checked="" type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

Note: This Certification must be signed by a responsible official as defined in 45CSR§30-2.38.

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name:

Jay Khetani

Title:

General Manager

Responsible official's signature:

Signature:

(Must be signed and dated in blue ink or have a valid electronic signature)

5/25/23

Signature Date:

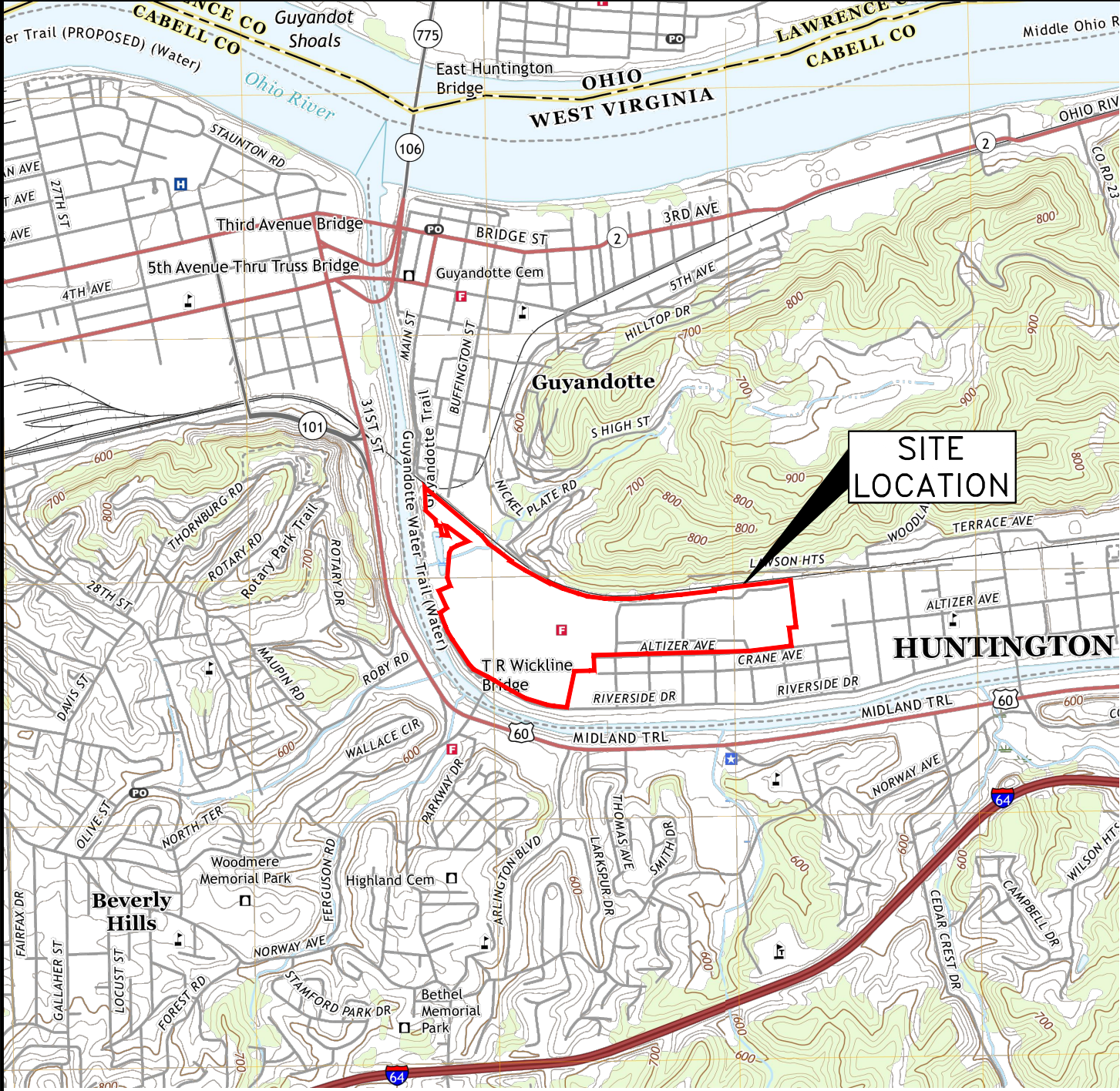
Note: Please check all applicable attachments included with this permit application:

- ATTACHMENT A: Area Map
- ATTACHMENT B: Plot Plan(s)
- ATTACHMENT C: Process Flow Diagram(s)
- ATTACHMENT D: Equipment Table
- ATTACHMENT E: Emission Unit Form(s)
- ATTACHMENT F: Schedule of Compliance Form(s)
- ATTACHMENT G: Air Pollution Control Device Form(s)
- ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

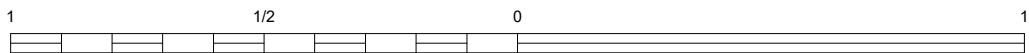
Attachment A
Area Map

C:\Users\smth\OneDrive\Arcadis\AUS\Special Metals Corp\3200 Riverside Dr\Huntington West Virginia\Project Files\2023\01-H Progress\01-DWG\SMC WV SUM-2023.dwg LAYOUT: SSAR SL SAVED: 5/11/2023 12:12 PM ACADVER: 24.2S (LMS TECH) PAGES: 1 OF 1 PLOTSTYLETABLE: ACAD.CTB PLOTTED: 5/11/2023 12:18 PM BY: SMITH, BOB XREFS:

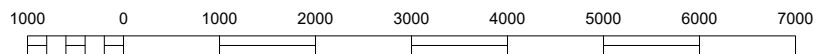


**SITE
LOCATION**

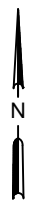
SCALE 1:24 000



SCALE IN MILE



SCALE IN FEET



WEST VIRGINIA

HUNTINGTON ALLOYS CORPORATION
3200 RIVERSIDE DRIVE, HUNTINGTON, WEST VIRGINIA

SITE LOCATION MAP



FIGURE
1

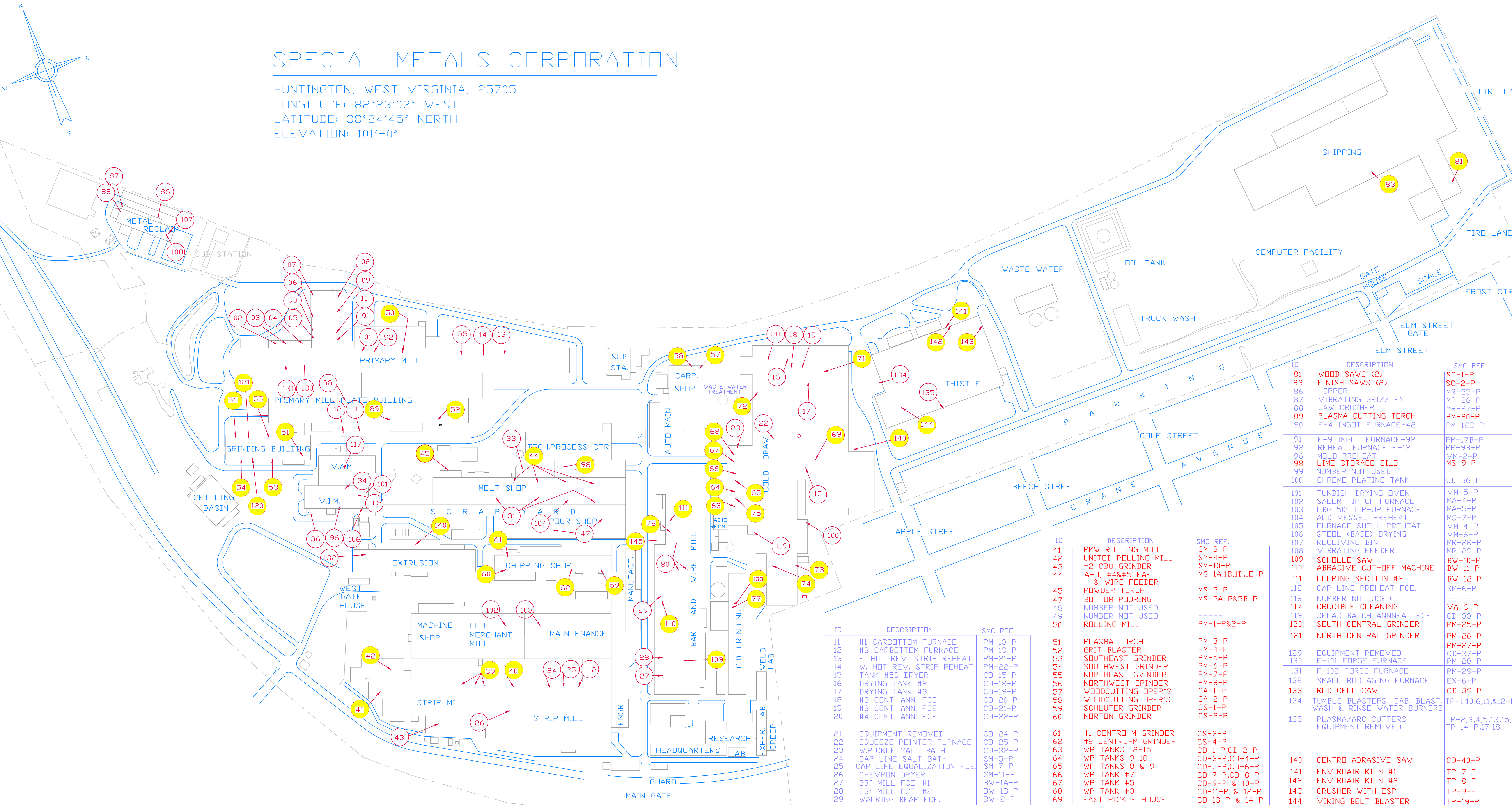
REFERENCE: USGS 7.5 MINUTE QUADRANGLE; HUNTINGTON, WEST VIRGINIA-OHIO 2019.

Attachment B

Plot Plan

SPECIAL METALS CORPORATION

HUNTINGTON, WEST VIRGINIA, 25705
 LONGITUDE: 82°23'03" WEST
 LATITUDE: 38°24'45" NORTH
 ELEVATION: 101'-0"



PLANT EMISSION SOURCES - HUNTINGTON PLANT

SCALE 1/16" = 10 FT.

HIGHLIGHTED SOURCES ARE TITLE V
 VISUAL EMISSION CHECKS

ID	DESCRIPTION	SMC REF.
01	REHEAT FURNACE F-11	PM-9A-P
02	F-2 FORGE FCE 21	PM-10A-P
03	F-3 FORGE FCE 22	PM-10B-P
04	F-3 FORGE FURNACE	PM-11-P
05	F-4 INGOT FURNACE-41	PM-12A-P
06	F-5 INGOT FURNACE	PM-13-P
07	F-6 INGOT FURNACE	PM-14-P
08	F-7 INGOT FURNACE	PM-15-P
09	F-8 INGOT FURNACE	PM-16-P
10	F-9 INGOT FURNACE-91	PM-17A-P

ID	DESCRIPTION	SMC REF.
11	#1 CARBOTTOM FURNACE	PM-18-P
12	#3 CARBOTTOM FURNACE	PM-19-P
13	E. HOT REV. STRIP REHEAT	PM-21-P
14	W. HOT REV. STRIP REHEAT	PM-22-P
15	TANK #59 DRYER	CD-15-P
16	DRYING TANK #2	CD-18-P
17	DRYING TANK #3	CD-19-P
18	#2 CNT. ANN. FCE.	CD-20-P
19	#3 CNT. ANN. FCE.	CD-21-P
20	#4 CNT. ANN. FCE.	CD-22-P

ID	DESCRIPTION	SMC REF.
41	MKW ROLLING MILL	SM-3-P
42	UNITED ROLLING MILL	SM-4-P
43	#2 CBU GRINDER	SM-10-P
44	A-O, #4 EAF & WIRE FEEDER	SM-1A,1B,1D,1E-P
45	POWDER TORCH	MS-2-P
47	BOTTOM POURING	MS-5A-P&5B-P
48	NUMBER NOT USED	----
49	NUMBER NOT USED	----
50	ROLLING MILL	PM-1-P&2-P

ID	DESCRIPTION	SMC REF.
51	PLASMA TORCH	PM-3-P
52	GRIT BLASTER	PM-4-P
53	SOUTHWEST GRINDER	PM-5-P
54	SOUTHWEST GRINDER	PM-5-P
55	NORTHEAST GRINDER	PM-7-P
56	NORTHWEST GRINDER	PM-8-P
57	WOODCUTTING OPER'S	CA-1-P
58	WOODCUTTING OPER'S	CA-2-P
59	SCHLUTER GRINDER	CS-1-P
60	NORTON GRINDER	CS-2-P

ID	DESCRIPTION	SMC REF.
61	#1 CENTRO-M GRINDER	CS-3-P
62	#2 CENTRO-M GRINDER	CS-4-P
63	WP TANKS 12-15	CD-1-P,CD-2-P
64	WP TANKS 9-10	CD-3-P,CD-4-P
65	WP TANKS 8 & 9	CD-5-P,CD-6-P
66	WP TANK #7	CD-7-P,CD-8-P
67	WP TANK #5	CD-9-P & 10-P
68	WP TANK #3	CD-11-P & 12-P
69	EAST PICKLE HOUSE	CD-13-P & 14-P
70	EQUIPMENT REMOVED	CD-16-P
71	EAST CUTTERS (3 SAWS)	CD-17-P
72	WEST CUTTERS (3 SAWS)	CD-23-P
73	MCKAY TUBE RED. SAW	CD-26-P
74	WEAN TUBE RED. SAW	CD-28-P
75	WP TANK #11	CD-38-P
76	NUMBER NOT USED	----
77	GRIND BUILDING SAW	CD-31-P
78	LOOPING SECT. 1	BW-3-P
80	22,23,&CC	BW-7-P,8-P&9-P

ID	DESCRIPTION	SMC REF.
81	WOOD SAWS (2)	SC-1-P
83	FINISH SAWS (2)	SC-2-P
86	HOPPER	MR-25-P
87	VIBRATING GRIZZLEY	MR-26-P
88	JAW CRUSHER	MR-27-P
89	PLASMA CUTTING TORCH	PM-20-P
90	F-4 INGOT FURNACE-42	PM-12B-P

ID	DESCRIPTION	SMC REF.
91	F-9 INGOT FURNACE-92	PM-17B-P
92	REHEAT FURNACE F-12	PM-9B-P
96	MOLD PREHEAT	VM-2-P
98	LIME STORAGE SILD	MS-9-P
99	NUMBER NOT USED	----
100	CHROME PLATING TANK	CD-36-P

ID	DESCRIPTION	SMC REF.
101	TUNDISH DRYING OVEN	VM-5-P
102	SALEM TIP-UP FURNACE	MA-4-P
103	DBG 50' TIP-UP FURNACE	MA-5-P
104	ADD VESSEL PREHEAT	MS-7-P
105	FURNACE SHELL PREHEAT	VM-4-P
106	STOOD (BASE) DRYING	VM-6-P
107	RECEIVING BIN	MR-28-P
108	VIBRATING FEEDER	MR-29-P
109	SCHOLLE SAW	BW-10-P
110	ABRASIVE CUT-OFF MACHINE	BW-11-P

ID	DESCRIPTION	SMC REF.
111	LOOPING SECTION #2	BW-12-P
112	CAP LINE PREHEAT FCE.	SM-6-P
116	NUMBER NOT USED	----
117	CRUCIBLE CLEANING	VA-6-P
119	SELAS BATCH ANNEAL FCE.	CD-33-P
120	SOUTH CENTRAL GRINDER	PM-25-P

ID	DESCRIPTION	SMC REF.
121	NORTH CENTRAL GRINDER	PM-26-P
129	EQUIPMENT REMOVED	PM-27-P
130	F-101 FORGE FURNACE	CD-37-P
131	F-102 FORGE FURNACE	PM-29-P
132	SMALL ROD AGING FURNACE	EX-6-P
133	ROD CELL SAW	CD-39-P

ID	DESCRIPTION	SMC REF.
134	TUMBLE BLASTERS, CAB. BLAST. WASH & RINSE WATER BURNERS	TP-1,10,6,11,&12-P
135	PLASMA/ARC CUTTERS	TP-2,3,4,5,13,15,16
	EQUIPMENT REMOVED	TP-14-P,17,18

ID	DESCRIPTION	SMC REF.
140	CENTRO ABRASIVE SAW	CD-40-P
141	ENVIROAIR KILN #1	TP-7-P
142	ENVIROAIR KILN #2	TP-8-P
143	CRUSHER WITH ESP	TP-9-P
144	VIKING BELT BLASTER	TP-19-P
145	BOILER	B-1A-P

PART	DESCRIPTION	REQ'D	MATERIAL	CODE No.	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	REFERENCE DRAWINGS	A/C No.
	I					ADDED ID 140	DAH	9/10	BCB			D	ADDED SMALL ROD AGING FCE #132	CJB	9/07	CEP							DATE 9-05-96	
	H					ADDED THISTLE POINTS	JDC	7/10	BCB			C	HIGHLIGHT VISUAL EMISSIONS	JRH	11/03	DAH							SCALE 1/16" = 10'	
	L					REVISED THISTLE POINTS	JDM	6/15				G	GENERAL REVISION	JRH	4/09	CEP							DRAWN PCH	
	K					ADDED PT 103	DAH	10/14	SAFETY			F	GENERAL REVISION	JRH	5/08	CEP							CHK'D ANSELL	
	J					Moved, Added ID Points 141 - 143	RAR	1/11				E	GENERAL REVISION	JRH	3-08	CEP							APP'VD	
												A	ADDED I.D. #130 & #131.	PCH	5/97								D23801 THROUGH D23807	
																							FOR B/M SEE:	
																							P.R. No.	
																							EQUIP. No. XXX	
																							A7C No.	

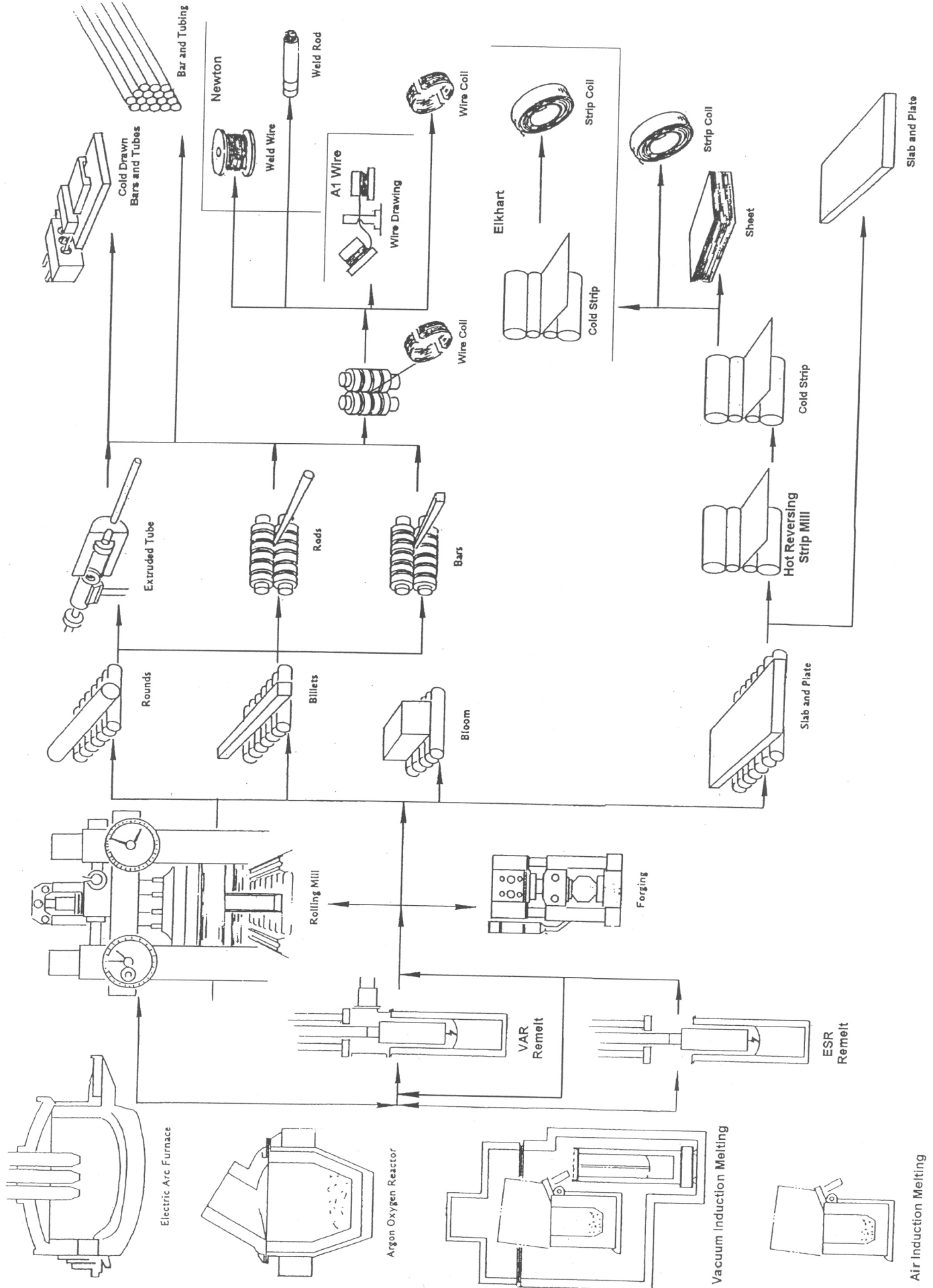
SPECIAL METALS CORPORATION
 3200 Riverside Drive
 Huntington, WV 25705-1771

EMISSION SOURCES- HUNTINGTON PLANT
 POINT I.D. NUMBERS
 ENVIRONMENTAL CONTROL

D-27819

Attachment C
Process Flow Diagram

HBE Production Process Routes



Attachment D
Title V Equipment Table

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Melt Shop					
B-1a-P	B-1a-S	Boiler	2019	33.5 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B	MS-1-S1 & MS-1-S2	#5 Electric Arc Furnace	1971	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1A	MS-1-S1 & MS-1-S2	Argon Oxygen Reactor	1971	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1E-P	MS-1-S1 & MS-1-S2	Wire Feeder	2005	70,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr combined with PM-6-P	Baghouse PM-6 & 25-C
PM-6-P	PM-6 & 25-S	Southwest Grinder	1974	see above	Baghouse PM-6 & 25-C
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr combined with PM-8-P	Baghouses PM-8A-C, PM-8-B-C & PM26-C
PM-8-P	PM-8 & 26-S	Northwest Grinder	1966	see above	Baghouses PM-8A-C, PM-8-B-C & PM26-C
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C
PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None
PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr combined with BW-12-P	None
BW-12-P	BW-3-S, BW-12-S	Wire Looping Section #2	1971	see above	None
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P,CD-2-P	CD-1-S,CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P,CD-4-P	CD-3-S,CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P,CS-6-P	CD-5-S,CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None
CD-7-P,CD-8-P	CD-7-S,CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P,CD-10-P	CD-9-S,CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P,CD-12-P	CD-11-S,CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P,CD-14-P	CD-13-S,CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5708 lbs/hr	Baghouse/ Cyclone CD-40-C
Carpenter Shop					
CA-1-P,CA-2-P	CA-1-S,CA-2	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP 7A 2C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lbs/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, Baghouse TP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None
TP-9-P	TP-9-S	Crusher	2011	7,040 lbs/hr / 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2015	15,000 lbs/hr	Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None
TP-13-P	TP-13-S	Arc Cutter	2013	15,000 lbs/hr	None
TP-15-P	TP-15-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-16-P	TP-16-S	Arc Cutter	2015	15,000 lbs/hr	None
TP-19-P	TP-19-S	Viking Belt Blaster	2015	600 lbs	Internal Baghouse

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

Attachment E
Emission Units

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: B-1a-P	Emission unit name: Boiler	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 Located beside Bar & Wire, used to produce steam for entire facility.

Manufacturer: Victory Energy	Model number: VEO-13964	Serial number: 13964
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Construction date: 2017	Installation date: 2019	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 33.5 MMBtu/hr

Maximum Hourly Throughput: 33.5 MMBtu/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 31,905 SCFH	Type and Btu/hr rating of burners: 33,500,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
 Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	20961.37
Carbon Monoxide (CO)	--	14.66
Nitrogen Oxides (NO _x)	--	17.59
Lead (Pb)	--	0.0001
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	1.34
Total Particulate Matter (TSP)	--	1.34
Sulfur Dioxide (SO ₂)	--	0.10
Volatile Organic Compounds (VOC)	--	0.96
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	4.2E-06
3-Methylchloranthrene	--	3.1E-07
7,12-Dimethylbenz(a)anthracene	--	2.8E-06
Acenaphthene	--	3.1E-07
Acenaphthylene	--	3.1E-07
Anthracene	--	4.2E-07
Benzene	--	3.7E-04
Benzo(a)anthracene	--	3.1E-07
Benzo(a)pyrene	--	2.1E-07
Benzo(b)fluoranthene	--	3.1E-07
Benzo(g,h,i)perylene	--	2.1E-07
Benzo(k)fluoranthene	--	3.1E-07
Chrysene	--	3.1E-07
Dibenzo(a,h)anthracene	--	2.1E-07
Dichlorobenzene	--	2.1E-04
Fluoranthene	--	5.4E-07
Fluorene	--	5.0E-07
Formaldehyde	--	1.3E-02
Hexane	--	3.1E-01
Indenol(1,2,3,c,d)pyrene	--	3.1E-07
Naphthalene	--	1.0E-04
Phenanthrene	--	3.0E-06
Pyrene	--	8.8E-07

Toluene	--	5.9E-04
Arsenic	--	3.5E-05
Beryllium	--	2.1E-06
Cadmium	--	1.9E-04
Chromium	--	2.4E-04
Cobalt	--	1.5E-05
Manganese	--	6.7E-05
Mercury	--	4.6E-05
Nickel	--	3.7E-04
Selenium	--	4.2E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 5.36 pounds per hour for B-1a-P and B-4-P.
[45CSR§2-4.1.b.]

4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2.]

4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 190.4 pounds per hour for B-1a-P and B-4-P.
[45C SR§10-3.3.f.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Boiler, V.I.M. Boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
[40 CFR §60.40c(g)(1)]

As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
[40 CFR §60.40c(g)(2)]

As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [40 CFR §60.40c(g)(3)]

All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 CFR §60.40c(i)]

The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

[40 CFR §60.48c(a)(1)-(4)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: B-4-P	Emission unit name: VIM Boiler	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Vacuum Induction Melting Department used to produce steam in department.

Manufacturer: Cleaver Brooks	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26 MMBtu/hr

Maximum Hourly Throughput: tons/hr	Maximum Annual Throughput: tons/hr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 24,762 SCFH	Type and Btu/hr rating of burners: 26,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	14,566
Carbon Monoxide (CO)	--	10.0
Nitrogen Oxides (NO _x)	--	12.0
Lead (Pb)	--	6.1E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.92
Total Particulate Matter (TSP)	--	0.92
Sulfur Dioxide (SO ₂)	--	0.07
Volatile Organic Compounds (VOC)	--	0.67
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.9E-06
3-Methylchloranthrene	--	2.2E-07
7,12-Dimethylbenz(a)anthracene	--	1.9E-06
Acenaphthene	--	2.2E-07
Acenaphthylene	--	2.2E-07
Anthracene	--	2.9E-07
Benzene	--	2.5E-07
Benzo(a)anthracene	--	2.2E-07
Benzo(a)pyrene	--	1.5E-07
Benzo(b)fluoranthene	--	2.2E-07
Benzo(g,h,i)perylene	--	1.5E-07
Benzo(k)fluoranthene	--	2.2E-07
Chrysene	--	2.2E-07
Dibenzo(a,h)anthracene	--	1.5E-07
Dichlorobenzene	--	1.5E-04
Fluoranthene	--	3.6E-07
Fluorene	--	3.4E-07
Formaldehyde	--	9.1E-03
Hexane	--	0.22
Indenol(1,2,3,c,d)pyrene	--	2.2E-07
Naphthalene	--	7.4E-05
Phenanthrene	--	2.1E-06
Pyrene	--	6.1E-07

Toluene	--	4.1E-04
Arsenic	--	2.4E-05
Beryllium	--	1.5E-06
Cadmium	--	1.3E-04
Chromium	--	1.7E-04
Cobalt	--	1.0E-05
Manganese	--	4.6E-05
Mercury	--	3.2E-05
Nickel	--	2.5E-04
Selenium	--	2.9E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 9.54 pounds per hour for B-1-P and B-4-P.
[45CSR§2-4.1.b.]

4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2.]

4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4.]

4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 339.2 pounds per hour for B-1-P and B-4-P.
[45CSR§10-3.3.f.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 - 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 - 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 - 1. A detailed explanation of the factors involved or causes of the malfunction;
 - 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 - 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 - 4. The maximum opacity measured or observed during the malfunction;
 - 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-1A-P	Emission unit name: 23" Mill Furnace #1	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used in heating alloy cogs for bar and wire products.

Manufacturer: Flinn	Model number:	Serial number:
Construction date: 1969	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.8 Ton/hr

Maximum Hourly Throughput: 1.8 Ton/hr	Maximum Annual Throughput: 15,768 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.51
Total Particulate Matter (TSP)	--	0.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.04
Cobalt	--	0
Copper	--	9.2E-03
Manganese	--	5.6E-03
Nickel	--	0.20
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4 .1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-1B-P	Emission unit name: 23" Mill Furnace #2	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used in heating alloy cogs for bar and wire products.

Manufacturer: Flinn	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.8 tons/hr

Maximum Hourly Throughput: 1.8 tons/hr	Maximum Annual Throughput: 15,768 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit BW-1A-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit BW-1A-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-2-P	Emission unit name: Walking Beam Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Furnace located in the Bar and Wire Mill and is used for wire products.

Manufacturer: Selas	Model number:	Serial number:
Construction date: 2/1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7.5 tons/hr

Maximum Hourly Throughput: 7.5 tons/hr	Maximum Annual Throughput: 65,700 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 26,667 SCFH	Type and Btu/hr rating of burners: 28,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-3-P BW-12-P	Emission unit name: Looping Section 1 Looping Section 2	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

These units are located in the Bar and Wire Department. The looping sections are used in the manufacturing of wire products.

Manufacturer: Looping Section 1 —Kocks Looping Section 2 – Morgands Hammen	Model number:	Serial number:
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Construction date: Section 1- 1970 Section 2- 1971	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 4.5 Ton/hr.

Maximum Hourly Throughput: 4.5 Ton/hr.	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	3.60
Total Particulate Matter (TSP)	--	3.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.25
Cobalt	--	0
Copper	--	0.07
Manganese	--	0.04
Nickel	--	1.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-10-P	Emission unit name: Scholle Saw	List any control devices associated with this emission unit: Baghouse BW-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The saw is used to cut pieces coming out of the Bar and Wire Mill.

Manufacturer: Scholle	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4.5 Ton/hr

Maximum Hourly Throughput: 4.5 Ton/hr	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.20
Total Particulate Matter (TSP)	--	1.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.08
Cobalt	--	0
Copper	--	0.02
Manganese	--	0.01
Nickel	--	0.46
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Scholle Saw	BW-10-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-11-P	Emission unit name: Abrasive Cut-Off Machine	List any control devices associated with this emission unit: Baghouse BW-11-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The saw is used to cut pieces coming out of the Bar and Wire Mill.

Manufacturer: Tysman	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4.5 Ton/hr

Maximum Hourly Throughput: 4.5 Ton/hr	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.58
Total Particulate Matter (TSP)	--	0.58
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.04
Cobalt	--	0
Copper	--	0.01
Manganese	--	6.4E-03
Nickel	--	0.22
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CA-1-P	Emission unit name: Carpenter Shop Woodcutting Operations	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: 1958	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 Ton

Maximum Hourly Throughput: 1.5 Ton	Maximum Annual Throughput: 28,470 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.40
Total Particulate Matter (TSP)	--	1.40
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Mass Balance</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CA-2-P	Emission unit name: Carpenter Shop Woodcutting Operations	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
Construction date: 1958	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 Ton

Maximum Hourly Throughput: 1.5 Ton	Maximum Annual Throughput: 28,470 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.77
Total Particulate Matter (TSP)	--	0.77
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Mass Balance</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-2-P	3

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-1-P CD-2-P	Emission unit name: West Pickle Tanks 12-15	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 31,500 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	6.5
Total Particulate Matter (TSP)	--	6.5
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	0.04
Nitric Acid (HNO ₃)	--	6.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-3-P CD-4-P	Emission unit name: West Pickle Tanks 9-11	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 19,665 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	7.8
Total Particulate Matter (TSP)	--	7.8
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	3.1
Sulfuric Acid (H ₂ SO ₄)	--	0.01
Nitric Acid (HNO ₃)	--	4.2
Ammonia (NH ₃)	--	0.45
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-5-P CD-6-P	Emission unit name: West Pickle Tanks 8,9	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 31,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.1
Total Particulate Matter (TSP)	--	2.1
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	0.35
Sulfuric Acid (H ₂ SO ₄)	--	0.61
Nitric Acid (HNO ₃)	--	1.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-7-P CD-8-P	Emission unit name: West Pickle Tank #7	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 8,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.10
Total Particulate Matter (TSP)	--	1.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nitric Acid (HNO ₃)	--	0.97
Hydrofluoric Acid (HF)	--	0.08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-9-P CD-10-P	Emission unit name: West Pickle Tank #5	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 8,650 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.30
Total Particulate Matter (TSP)	--	1.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nitric Acid (HNO ₃)	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-11-P CD-12-P	Emission unit name: West Pickle Tank #3	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 11,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.16
Total Particulate Matter (TSP)	--	0.16
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	0.16
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-13-P CD-14-P	Emission unit name: East Pickle	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides. Includes east pickle house tanks 51, 52, 53, 55, 56, 57, 58, 59.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1960	Installation date: 1960	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 73,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 3,713 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	4.40
Total Particulate Matter (TSP)	--	4.40
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	1.00
Nitric Acid (HNO ₃)	--	3.10
Hydrofluoric Acid (HF)	--	0.33
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-17-P	Emission unit name: East Cutters (3 Saws)	List any control devices associated with this emission unit: CD-17-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy rod cutting.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1960	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.275 tons/hr

Maximum Hourly Throughput: 0.275 tons/hr	Maximum Annual Throughput: 2,409 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	3.7E-03
Cobalt	--	2.8E-06
Copper	--	1.2E-04
Manganese	--	1.1E-04
Nickel	--	8.2E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
East Cutters (3 Saws)	CD-17-P	0.43

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-23-P	Emission unit name: West Cutters (3 Saws)	List any control devices associated with this emission unit: Baghouse CD-23-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy rod Cutting.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.36 tons/hr

Maximum Hourly Throughput: 0.36 tons/hr	Maximum Annual Throughput: 3154 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.36
Total Particulate Matter (TSP)	--	0.36
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.05
Cobalt	--	3.6E-05
Copper	--	1.5E-03
Manganese	--	1.4E-03
Nickel	--	0.11
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
West Cutters (3 Saws)	CD-23-P	0.57

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-31-P	Emission unit name: Grind Building Saw	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Small alloy rod cutting to length.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1950	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.46 tons/hr

Maximum Hourly Throughput: 0.46 tons/hr	Maximum Annual Throughput: 4,030 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.01
Cobalt	--	8.7E-06
Copper	--	3.8E-04
Manganese	--	3.3E-04
Nickel	--	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Grind Building Saw	CD-31-P	0.72

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-32-P	Emission unit name: West Pickle Salt Bath	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Surface treatment to remove oxides from products.

Manufacturer: Kolene	Model number:	Serial number:
Construction date: < 1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7.2 mmbtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,857 SCFH	Type and Btu/hr rating of burners: 7,200,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	3,604
Carbon Monoxide (CO)	--	2.50
Nitrogen Oxides (NO _x)	--	3.00
Lead (Pb)	--	1.5E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.23
Total Particulate Matter (TSP)	--	0.23
Sulfur Dioxide (SO ₂)	--	0.02
Volatile Organic Compounds (VOC)	--	0.17
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	7.2E-07
3-Methylchloranthrene	--	5.4E-08
7,12-Dimethylbenz(a)anthracene	--	4.8-E07
Acenaphthene	--	5.4E-08
Acenaphthylene	--	5.4E-08
Anthracene	--	7.2E-08
Benzene	--	6.3E-05
Benzo(a)anthracene	--	5.4E-08
Benzo(a)pyrene	--	3.6E-08
Benzo(b)fluoranthene	--	5.4E-08
Benzo(g,h,i)perylene	--	3.6E-08
Benzo(k)fluoranthene	--	5.4E-08
Chrysene	--	5.4E-08
Dibenzo(a,h)anthracene	--	3.6E-08
Dichlorobenzene	--	3.6E-05
Fluoranthene	--	9.0E-08
Fluorene	--	8.4E-08
Formaldehyde	--	2.3E-03
Hexane	--	0.05
Indenol(1,2,3,c,d)pyrene	--	5.4E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.8E-05
Phenanthrene	--	5.1E-07
Pyrene	--	1.5E-07
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	--	1.0E-04
Arsenic	--	6.0E-06
Beryllium	--	3.6E-07
Cadmium	--	3.3E-05
Chromium	--	4.2E-05
Cobalt	--	2.5E-06
Manganese	--	1.1E-05
Mercury	--	7.8E-06
Nickel	--	6.3E-05
Selenium	--	7.2E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-36-P	Emission unit name: Cold Draw Hard Chrome Plating	List any control devices associated with this emission unit: CD-36-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two hard chrome plating tanks utilized for placing a thick chrome layer on various tools & dies used in the cold draw department primarily, but also in other areas of the plant. The process unit consists of primary and secondary chrome plating tanks. Tank #2 is the primary tank and it has an electrical capacity of 600 amps. Tank #1 is the secondary tank and it has an electrical capacity of 400 amps. Both tank's contents consist of 440 pounds of chromic acid and 800 liters of sulfuric acid. In addition to the two chromic acid tanks there is a sulfuric etch tank and there is a stripping tank.

The hard chrome plating process at our facility is a "small" hard chrome plating process according to EPA standards. Our maximum potential cumulative rectifier capacity of 5,880,000 amp-hrs/yr. is far below the 60,000,000 amp-hrs/yr small source cutoff.

Manufacturer: Unknown	Model number:	Serial number:
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Construction date: 01/01/1950	Installation date: 05/01/1950	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,880,000 amp-hrs/yr

Maximum Hourly Throughput: 12 tons/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	6.1E-05
Total Particulate Matter (TSP)	--	6.1E-05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	5.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>A stack test was conducted on this source in December, 1996 to determine compliance with the NESHAP regulatory limits. The source was found to be in compliance with the NESHAP emission limitation for the hard chromium plating subcategory.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]

12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]

12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]

12.1.4. The work practice standards of this section address operation and maintenance practices. All owners or operators subject to the standards of this section are subject to these work practice standards.

(1) (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by Section 12.1.4.(2) of this permit.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by Section 12.1.4.(2) of this permit.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

[45CSR34 and 40 C.F.R. § 63.342(f)(1)]

(2) (i) The owner or operator of an affected source subject to the work practices of Section 12.1.4.(1) of this permit shall prepare an operation and maintenance plan to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in 40 C.F.R. § 63.342(f)(3) (A) through (E).

(ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(iii) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by Section 12.1.4.(2)(i) of this permit, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.

(iv) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 C.F.R. 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

[45CSR34 and 40 C.F.R. § 63.342(f)(3)]

12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.
[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

12.3.1. Performance tests shall be conducted using the test methods and procedures in sections 40 C.F.R. §§ 63.344(c)(1), 63.344(d)(2)(ii), 63.344(d)(5), 63.344(e)(2), and 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(9) of 40 C.F.R. § 63.344. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
[45CSR34 and 40 C.F.R. § 63.344(a)]

12.4.1. (a) The owner or operator of each affected source subject to the standards of 40 C.F.R. § 63.346 shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N.

(b) The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.

(1) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

(2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;

(3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;

(4) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;

(5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);

(6) Test reports documenting results of all performance tests;

(7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 C.F.R. § 63.344(e);

(8) Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;

(9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;

(10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;

(11) The total process operating time of the affected source during the reporting period;

(12) All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.

(c) All records shall be maintained for a period of 5 years in accordance with 40 C.F.R. § 63.10(b)(1).

[45CSR34 and 40 C.F.R. § 63.346]

12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.

[45CSR34 and 40 C.F.R. § 63.347(a)]

12.5.2. Ongoing compliance status reports for major sources. The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.

[45CSR34 and 40 C.F.R. § 63.347(g)]

12.5.3. Contents of ongoing compliance status reports. The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).

[45CSR34 and 40 C.F.R. § 63.347(g)(3)]

12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-38-P	Emission unit name: West Pickle Ammonia Tank	List any control devices associated with this emission unit: CD-38-C Ammonia Scrubber
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit CD-3-P & CD-4-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit CD-3-P & CD-4-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-39-P	Emission unit name: Rod Cell Saw	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy tube cutting to length.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 tons/hr

Maximum Hourly Throughput: 0.5 tons/hr	Maximum Annual Throughput: 4380 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.01
Cobalt	--	9.5E-06
Copper	--	4.1E-04
Manganese	--	3.6E-04
Nickel	--	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-40-P	Emission unit name: Centro Metalcut Type CAC 1220 Abrasive Saw	List any control devices associated with this emission unit: CD-40-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy tubes, rods, and rounds will be taken to the saw to be finish cut into customer specifications.

Manufacturer: Centro-Metalcut	Model number: CAC 1220	Serial number:
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Construction date: 2010	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,708 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	5.60
Total Particulate Matter (TSP)	--	5.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.56
Cobalt	--	0.14
Copper	--	0.27
Manganese	--	0.03
Nickel	--	2.50
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Volume removed from saw blade thickness and baghouse control efficiency.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 – R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.4.2. Record of Maintenance of Air Pollution Control Equipment. For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163]

7.4.3. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-1-P	Emission unit name: Schluter Grinder	List any control devices associated with this emission unit: Baghouse CS-1-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Schluter	Model number:	Serial number:
Construction date: 1964	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.55 tons/hr

Maximum Hourly Throughput: 0.55 tons/hr	Maximum Annual Throughput: 4,818 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.51
Total Particulate Matter (TSP)	--	0.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.07
Cobalt	--	3.6E-03
Copper	--	0.03
Manganese	--	2.7E-03
Nickel	--	0.27
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Schluter Grinder	CS-1-P	0.41

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-2-P	Emission unit name: Norton Grinder	List any control devices associated with this emission unit: Baghouse CS-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Norton	Model number:	Serial number:
Construction date: 1958	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.15 tons/hr

Maximum Hourly Throughput: 1.15 tons/hr	Maximum Annual Throughput: 10,074 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.10
Total Particulate Matter (TSP)	--	1.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.14
Cobalt	--	7.6E-03
Copper	--	0.06
Manganese	--	5.6E-03
Nickel	--	0.57
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Norton Grinder	CS-2-P	0.85

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-3-P	Emission unit name: # 1 Centro-M Grinder	List any control devices associated with this emission unit: Baghouse CS-3-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Centro Maskin	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.05 tons/hr

Maximum Hourly Throughput: 1.05 tons/hr	Maximum Annual Throughput: 9,198 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.98
Total Particulate Matter (TSP)	--	0.98
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.13
Cobalt	--	6.9E-03
Copper	--	0.06
Manganese	--	5.1E-03
Nickel	--	0.52
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#1 Centro-M Grinder	CS-3-P	0.77

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-4-P	Emission unit name: #2 Centro-M Grinder	List any control devices associated with this emission unit: Baghouse CS-4-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Centro Maskin	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.05 tons/hr

Maximum Hourly Throughput: 1.05 tons/hr	Maximum Annual Throughput: 9,198 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.98
Total Particulate Matter (TSP)	--	0.98
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.13
Cobalt	--	7.0E-03
Copper	--	0.06
Manganese	--	5.1E-03
Nickel	--	0.52
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#2 Centro-M Grinder	CS-4-P	0.78

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MA-4-P	Emission unit name: Salem Tip-up Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one Heat Treat furnace located in the Machine Shop department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the heat treating (annealing) of alloy products.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 12/01/1993	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14.46 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 13,771 SCFH	Type and Btu/hr rating of burners: 14,460,000 Btu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2.5 ppm	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,238
Carbon Monoxide (CO)	--	5.1
Nitrogen Oxides (NO _x)	--	3.0
Lead (Pb)	--	3.0E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.46
Total Particulate Matter (TSP)	--	0.46
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	1.4E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	9.7E-07
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.4E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.2E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.2E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.2E-08
Dichlorobenzene	--	7.2E-05
Fluoranthene	--	1.8E-07
Fluorene	--	1.7E-07
Formaldehyde	--	4.5E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.7E-05
Phenathrene	--	1.0E-06
Pyrene	--	3.0E-07
Toluene	--	2.1E-04
Arsenic	--	1.2E-05
Beryllium	--	7.2E-07
Cadmium	--	6.6E-05
Chromium	--	8.4E-05
Cobalt	--	5.1E-06
Manganese	--	2.3E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.4. In accordance with the permit application and its amendments, discharge from the Salem Tip-up furnace (MA-4-P) to the roof vent fans shall not exceed the following limitations:

Particulate	0.07 lb/hr
SO2	0.01 lb/hr
NOx	1.93 lb/hr
CO	0.48 lb/hr
VOC	0.04 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1646 and 45CSR§7-4.1.]

5.1.5. In accordance with the permit application and its amendments, natural gas consumption in the Salem Tip-up furnace (MA-4-P) shall not exceed 13,800 cf/hr.
[45CSR13 - R13-1646]

5.1.6. In accordance with the permit application and its amendments, the Salem Tip-up furnace (MA-4-P) shall not process more than 20,000 lb/hr of alloy rods.
[45CSR13 - R13-1646]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

5.4.1. The permittee shall maintain records showing the amount of natural gas fired monthly in the Salem Tip-up furnace (MA-4-P) as required in Section 5.1.5. Such records shall be maintained by the permittee for at least three (3) years. Monthly records shall be made available to the Director or his duly authorized representative upon request. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1646]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MA-5-P	Emission unit name: MA-5-P Tip up furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 This emission unit consists of one Heat Treat furnace located in the Machine Shop department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the heat treating (annealing) of alloy products.

Manufacturer: O'Brien and Gere	Model number: 50'	Serial number:
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Construction date: 2015	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 15.2 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 14,476 SCFH	Type and Btu/hr rating of burners: 15,200,000 Btu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

 Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2.5	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,238
Carbon Monoxide (CO)	--	5.1
Nitrogen Oxides (NO _x)	--	3.0
Lead (Pb)	--	3.0E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.46
Total Particulate Matter (TSP)	--	0.46
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	1.4E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	9.7E-07
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.4E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.2E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.2E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.2E-08
Dichlorobenzene	--	7.2E-05
Fluoranthene	--	1.8E-07
Fluorene	--	1.7E-07
Formaldehyde	--	4.5E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.7E-05
Phenathrene	--	1.0E-06
Pyrene	--	3.0E-07
Toluene	--	2.1E-04
Arsenic	--	1.2E-05
Beryllium	--	7.2E-07
Cadmium	--	6.6E-05
Chromium	--	8.4E-05
Cobalt	--	5.1E-06
Manganese	--	2.3E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.4. In accordance with the permit application and its amendments, discharge from the MA-S-P Tip-up furnace to the roof vent fans shall not exceed the following limitations:

Particulate	0.11 lb/hr
SO ₂	0.01 lb/hr
NO _x	1.45 lb/hr
CO	1.22 lb/hr
VOC	0.08 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1. [45CSR13 - R13-1646 and 45CSR§7-4.1.]

5.1.5. In accordance with the permit application and its amendments, natural gas consumption in the MA-5-P Tip-up furnace shall not exceed 14,476 cf/hr.
[45CSR13 - R13-1646]

5.1.6. In accordance with the permit application and its amendments, the Tip-up furnace MA-5-P shall not process more than 30,000 lb/hr of alloy rods.
[45CSR13 - R13-1646]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-A	Emission unit name: Argon Oxygen Reactor (AOD)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used to introduce oxygen and argon to a melted alloy heat of metal to improve the quality.

Manufacturer: Pecor	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Furnace dust chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-B	Emission unit name: #5 Electric Arc Furnace (EAF)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used on the melting of non-ferrous nickel alloys.

Manufacturer: Lectromag	Model number:	Serial number:
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Construction date: 1971	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Dust chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#5 Electric Arc Furnace	MS-1B	11.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4 .1]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-D	Emission unit name: #4 Electric Arc Furnace (EAF)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used on the melting of non-ferrous nickel alloys.

Manufacturer: Lectromag	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.80
Total Particulate Matter (TSP)	--	2.80
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.09
Cobalt	--	2.5E-03
Copper	--	0.08
Lead	--	1.2E-03
Manganese	--	0.03
Mercury	--	4.3E-05
Nickel	--	0.41
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42, Bag-House Dust Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source or operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#4 Electric Arc Furnace	MS-1D	11.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1E-P	Emission unit name: Wire Feeder	List any control devices associated with this emission unit: MS-1-C2, MS-1-C1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Melt Shop, used for adding raw wire materials into the ladle.

Manufacturer: PC Campana	Model number:	Serial number:
Construction date: 2005	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35 Tons/hr

Maximum Hourly Throughput: 35 Tons/hr	Maximum Annual Throughput: 306,600 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.
[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-2-P	Emission unit name: Powder Torch	List any control devices associated with this emission unit: Baghouse MS-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located on the north side of the Refinery Melt Shop. The powder torch is used in cutting scrap metal into smaller more manageable pieces that can be placed back into the furnaces.

Manufacturer: Lindle	Model number:	Serial number:
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Construction date: 1962	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35 tons/hr

Maximum Hourly Throughput: 35 tons/hr	Maximum Annual Throughput: 306,600 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X No	If yes, is it? ___ Indirect Fired ___Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.0E-03
Cobalt	--	2.8E-05
Copper	--	8.5E-04
Manganese	--	3.7E-04
Nickel	--	4.5E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Bag-House Dust Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Powder Torch	MS-2	5.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-9-P	Emission unit name: Lime Storage Silo	List any control devices associated with this emission unit: Baghouse MS-9-C	
<p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>This process group consists of two lime storage bins located at the melt shop. The lime storage bin is the conveying method for pebble lime that is utilized by the melt shop as a raw material in alloy production. The lime bin has a control device to capture lime emissions during bin loading operations. The baghouse dust collector is mounted in the roof of the storage bin.</p>			
Manufacturer: Unknown	Model number:	Serial number:	
Construction date: 1975	Installation date:	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 15 Tons/hour			
Maximum Hourly Throughput:	Maximum Annual Throughput: 5,979 Tons/yr	Maximum Operating Schedule: 24/7/52	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.10
Total Particulate Matter (TSP)	--	0.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Reg. 7 Sections 3.1 and 3.2 - The emission methods utilized to determine actual emission rates were as follows:</p> <p>1. 99.9% efficiency baghouse - manufacturers data</p> <p>Emission rate limits based on average pound per hour process rates (and duplicate sources where applicable) were calculated and compared to the estimated emissions of each process.</p> <p>Reg.7. Actual Emissions & Allowable Emission Rates Pounds per Hour</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]

10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

10.4.1. The permittee shall maintain the design information on the baghouse at the facility.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-1 & 2-P	Emission unit name: #1 Primary Rolling Mill	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Primary Mill Department. The equipment is used for the rolling of alloy into plates.

Manufacturer: Mesta	Model number:	Serial number:
Construction date: 1964	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50 tons/hr

Maximum Hourly Throughput: 50 tons/hr	Maximum Annual Throughput: 438,000 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	17.0
Total Particulate Matter (TSP)	--	17.0
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.20
Cobalt	--	0
Copper	--	0.31
Manganese	--	0.19
Nickel	--	6.80
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emission Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#1 Primary Rolling Mill	PM-1&2P	24.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-3-P	Emission unit name: Plasma Cutting Torch	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Primary Mill Department. The equipment is used for the cutting of alloy slabs.

Manufacturer: Thermal Dynamics	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 tons/hr

Maximum Hourly Throughput: 1.5 tons/hr	Maximum Annual Throughput: 13,140 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.80
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.25
Cobalt	--	6.7E-03
Copper	--	0.06
Manganese	--	0.01
Nickel	--	1.10
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plasma Torch	PM-3-P	3.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-4-P	Emission unit name: Grit Blaster (Plate Cleaning Machine)	List any control devices associated with this emission unit: Baghouse PM-4-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 Located in the Primary Mill, used to surface clean large plate product.

Manufacturer: Pangborn	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 1.95 tons/hr

Maximum Hourly Throughput: 1.95 tons/hr	Maximum Annual Throughput: 17,802 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes ___ <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
 N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	1.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.15
Cobalt	--	1.2E-04
Copper	--	5.0E-03
Manganese	--	4.4E-03
Nickel	--	0.34
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-5-P	Emission unit name: Southeast Grinder	List any control devices associated with this emission unit: Baghouse PM-5-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Midwest	Model number:	Serial number:
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Construction date: 1980	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.30
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southeast Grinder	PM-5-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-6-P	Emission unit name: Southwest Grinder	List any control devices associated with this emission unit: Baghouse PM-6 & 25-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Centro Maskin	Model number:	Serial number:
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Construction date: 1974	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.3
Total Particulate Matter (TSP)	--	2.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southwest Grinder	PM-6-P	2.99

[45CSR§7-4.1., 45CSR13 – R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-7-P	Emission unit name: Northeast Grinder	List any control devices associated with this emission unit: Baghouse PM-7-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Centro Maskin	Model number:	Serial number:
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Construction date: 1965	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northeast Grinder	PM-7-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-8-P	Emission unit name: Northwest Grinder	List any control devices associated with this emission unit: Baghouse PM-8-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Tysamen	Model number:	Serial number:
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Construction date: 1966	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northwest Grinder	PM-8-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-10A-P PM-10B-P	Emission unit name: F-2 Forge Furnace 21 F-2 Forge Furnace 22	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating (forging) furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Olsen	Model number:	Serial number:
Construction date: 1989	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 3.1875 tons/hr each

Maximum Hourly Throughput: 3.1875 tons/hr each	Maximum Annual Throughput: 27,922.5 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 9,524 SCFH	Type and Btu/hr rating of burners: 10,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	245,048
Carbon Monoxide (CO)	--	172
Nitrogen Oxides (NO _x)	--	204
Lead (Pb)	--	1.0E-03
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	16.0
Total Particulate Matter (TSP)	--	16.0
Sulfur Dioxide (SO ₂)	--	1.20
Volatile Organic Compounds (VOC)	--	11.0
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	4.9E-05
3-Methylchloranthrene	--	3.7E-06
7,12-Dimethylbenz(a)anthracene	--	3.3E-05
Acenaphthene	--	3.7E-06
Acenaphthylene	--	3.7E-06
Anthracene	--	4.9E-06
Benzene	--	4.3E-03
Benzo(a)anthracene	--	3.7E-06
Benzo(a)pyrene	--	2.5E-06
Benzo(b)fluoranthene	--	3.7E-06
Benzo(g,h,i)perylene	--	2.5E-06
Benzo(k)fluoranthene	--	3.7E-06
Chrysene	--	3.7E-06
Dibenzo(a,h)anthracene	--	2.5E-06
Dichlorobenzene	--	2.5E-03
Fluoranthene	--	6.1E-06
Fluorene	--	5.7E-06
Formaldehyde	--	0.15
Hexane	--	3.7
Indenol(1,2,3,c,d)pyrene	--	3.7E-06

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.2E-03
Pyrene	--	1.0E-05
Toluene	--	6.9E-03
Arsenic	--	4.1E-04
Beryllium	--	2.5E-05
Cadmium	--	2.2E-03
Chromium	--	2.9E-03
Cobalt	--	1.7E-04
Manganese	--	7.8E-04
Mercury	--	5.3E-04
Nickel	--	4.3E-03
Selenium	--	4.9E-05
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-11-P	Emission unit name: F-3 Forge Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating (forging) furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air through a dedicated stack. The furnace is used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Salem	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3.1875 tons/hr

Maximum Hourly Throughput: 3.1875 tons/hr	Maximum Annual Throughput: 27,922.5 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 54,286 SCFH	Type and Btu/hr rating of burners: 57,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 40CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR §10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-12A-P PM-12B-P	Emission unit name: F-4 Ingot Furnace 41 F-4 Ingot Furnace 42	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: A- 1992 B- 1992	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 2.835 tons/hr each

Maximum Hourly Throughput: 2.835 tons/hr each	Maximum Annual Throughput: 24,834.6 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 11,429 SCFH	Type and Btu/hr rating of burners: 12,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-13-P	Emission unit name: F-5 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air. The furnace is used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 40,000 SCFH	Type and Btu/hr rating of burners: 42,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P.		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P.		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Ingot Furnace F-5	PM-13-P	11.20

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-14-P PM-15-P	Emission unit name: F-6 Ingot Furnace F-7 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Flinn & Dreffein	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 4.5 tons/hr each

Maximum Hourly Throughput: 4.5 tons/hr each	Maximum Annual Throughput: 39,420 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 71,429 SCFH	Type and Btu/hr rating of burners: 75,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Ingot Furnace F-6	PM-14-P	9.00
Ingot Furnace F-7	PM-15-P	9.00

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-16-P	Emission unit name: F-8 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air. The furnace is used for the heating of alloy ingots.

Manufacturer: Flinn & Dreffein	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 34,286 SCFH	Type and Btu/hr rating of burners: 36,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-17A-P PM-17B-P	Emission unit name: F-9 Ingot Furnace 91 F-9 Ingot Furnace 92	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: 1992	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 2.835 tons/hr each

Maximum Hourly Throughput: 2.835 tons/hr each	Maximum Annual Throughput: 24,834.6 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 11,429 SCFH	Type and Btu/hr rating of burners: 12,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.71]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-18-P PM-19-P	Emission unit name: #1 Carbottom Furnace #3 Carbottom Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy plate and coil products.

Manufacturer: Modern Industrial Heating	Model number:	Serial number:
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Construction date: #1 <1970 #3 <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 18.0 mmbtu/hr each

Maximum Hourly Throughput: 18.0 mmbtu/hr each	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 17,143 SCFH	Type and Btu/hr rating of burners: 18,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-20-P	Emission unit name: PM Plate Plasma Torch	List any control devices associated with this emission unit: Baghouse PM-20-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The plasma torch is a gas cutting torch that is utilized for squaring up the ends of plate alloy stock before it is processed through the stretch leveler.

Manufacturer: Thermal Dynamics Corp.	Model number: PAK 10XR	Serial number:
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Construction date: 10/01/1989	Installation date: 10/15/1989	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2.5 tons/hr

Maximum Hourly Throughput: 2.5 tons/hr	Maximum Annual Throughput: 21,900 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.11
Total Particulate Matter (TSP)	--	0.11
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	9.7E-03
Cobalt	--	2.6E-04
Copper	--	2.2E-03
Manganese	--	5.4E-04
Nickel	--	0.04
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions were estimated by using stack test data from the other plasma torch in primary mill.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1.]

6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 lb/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1165 and 45CSR§7-4.1.]

6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.
[45CSR13 - R13-1165]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-23-P	Emission unit name: PM Plate Anneal Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one plate anneal furnace located in the primary mill department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the annealing of alloy products.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 09/07/1993	Installation date: 09/07/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 Tons/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/5
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 24,762 SCFH	Type and Btu/hr rating of burners: 26,000,000 Btu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	13,015
Carbon Monoxide (CO)	--	9.1
Nitrogen Oxides (NO _x)	--	17.0
Lead (Pb)	--	5.4E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.82
Total Particulate Matter (TSP)	--	0.82
Sulfur Dioxide (SO ₂)	--	0.07
Volatile Organic Compounds (VOC)	--	0.60
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.6E-06
3-Methylchloranthrene	--	2.0E-07
7,12-Dimethylbenz(a)anthracene	--	1.7E-06
Acenaphthene	--	2.0E-07
Acenaphthylene	--	2.0E-07
Anthracene	--	2.6E-06
Benzene	--	2.3E-04
Benzo(a)anthracene	--	2.0E-07
Benzo(a)pyrene	--	1.3E-07
Benzo(b)fluoranthene	--	2.0E-07
Benzo(g,h,i)perylene	--	1.3E-07
Benzo(k)fluoranthene	--	2.0E-07
Chrysene	--	2.0E-07
Dibenzo(a,h)anthracene	--	1.3E-07
Dichlorobenzene	--	1.3E-04
Fluoranthene	--	3.3E-07
Fluorene	--	3.0E-07
Formaldehyde	--	8.1E-03
Hexane	--	0.20
Indenol(1,2,3,c,d)pyrene	--	2.0E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	6.6E-05
Pyrene	--	5.4E-07
Toluene	--	3.7E-04
Arsenic	--	2.2E-05
Beryllium	--	1.3E-06
Cadmium	--	1.2E-04
Chromium	--	1.5E-04
Cobalt	--	9.1E-06
Manganese	--	4.1E-05
Mercury	--	2.8E-05
Nickel	--	2.3E-04
Selenium	--	2.6E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0×10^6 Btu/hr.
[45CSR13 - R13-1767]

5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:
Particulates 0.075 lb/hr
Sulfur Dioxide 0.015 lb/hr
Nitrogen Oxide 2.5 lb/hr
Carbon Monoxide 0.875 lb/hr
Total Hydrocarbons 0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1767 and 45CSR§7-4.1. (PM-23-P)]

5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.
[45CSR13 - R13-1767]

5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.
[45CSR13 - R13-1767]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NOx emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767 and 45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form as **ATTACHMENT F**.**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-25-P	Emission unit name: Southcentral Grinder	List any control devices associated with this emission unit: Baghouse PM-6 & 25-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Midwest	Model number:	Serial number:
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Construction date: 1966	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southcentral Grinder	PM-25-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-26-P	Emission unit name: Northcentral Grinder	List any control devices associated with this emission unit: Baghouse PM-26-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Beardsley piper9	Model number:	Serial number:
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Construction date: 1980	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northcentral Grinder	PM-26-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-28-P PM-29-P	Emission unit name: PM Forge Furnace F-101 PM Forge Furnace F-102	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating (forging) furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 01/01/1998	Installation date: 04/01/1998	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 6.5 tons/hr each

Maximum Hourly Throughput: 6.5 tons/hr each	Maximum Annual Throughput: 56,940 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,509
Carbon Monoxide (CO)	--	5.3
Nitrogen Oxides (NO _x)	--	3.1
Lead (Pb)	--	3.1E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.48
Total Particulate Matter (TSP)	--	0.48
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.34
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	1.5E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	1.0E-06
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.5E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.5E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.5E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.5E-08
Dichlorobenzene	--	7.5E-05
Fluoranthene	--	1.9E-07
Fluorene	--	1.8E-07
Formaldehyde	--	4.7E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.8E-05
Pyrene	--	3.1E-07
Toluene	--	2.1E-04
Arsenic	--	1.3E-05
Beryllium	--	7.5E-07
Cadmium	--	6.9E-05
Chromium	--	8.8E-05
Cobalt	--	5.3E-06
Manganese	--	2.4E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.5E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45C SR§10-4.1.]

5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission Rate for Two Furnaces	
	(lb/hr)	(tons/yr) ⁽²⁾	(lb/hr)	(tons/yr)
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: (1) Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

(2) Annual emissions are based on an operating schedule of 8,760 hours per year.

[45CSR13 - R13-2163, and 45CSR§7-4.1.]

5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.
[45CSR13 - R13-2163]

5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NO_x burners for each furnace not to exceed 1.25 MM Btu/hr heat input).
[45CSR13 - R13-2163]

5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).
[45CSR13 - R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described.

[45CSR13-R13-2163]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form as **ATTACHMENT F**.**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SC-1-P	Emission unit name: Service Center Wood Saws	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 Ton

Maximum Hourly Throughput: 0.5 Ton	Maximum Annual Throughput: 9,490 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.05
Total Particulate Matter (TSP)	--	0.05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Mass Balance</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wood Saws	SC-1-P	1

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SC-2-P	Emission unit name: Service Center Finish Saw	List any control devices associated with this emission unit: SC-2-C Wet Mist Scrubber
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Service Center, used to finish cut alloy material.

Manufacturer: Savage	Model number:	Serial number:
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Construction date: 1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 Tons/hr

Maximum Hourly Throughput: 0.5 Tons/hr	Maximum Annual Throughput: 4,380 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	4.1
Total Particulate Matter (TSP)	--	4.1
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.10
Copper	--	0.20
Manganese	--	0.02
Nickel	--	1.9
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-1-P	Emission unit name: CAP Line Pickling	List any control devices associated with this emission unit: SM-1-C Mist Eliminator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Continuous Anneal & Pickle (CAP) Line is a series of furnaces and pickling tanks to continuously anneal and pickle long coils of strip end to end.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1966	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 Tons per hour

Maximum Hourly Throughput: 6 Tons	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.4
Total Particulate Matter (TSP)	--	1.4
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	0.22
Nitric Acid (HNO ₃)	--	0.66
Hydrofluoric Acid (HF)	--	0.55
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-2-P	Emission unit name: CAP Shot Blaster	List any control devices associated with this emission unit: Wet Scrub SM-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located on the CAP line in the Sheet and Strip Mill. The shot blaster is used to remove oxide from alloy sheet.

Manufacturer: Pangborn	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	1.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel (Ni)	--	0.14
Copper (Cu)	--	0.01
Chromium (Cr)	--	0.07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Used Shot Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
CAP Shot Blaster	SM-2-P	9.15

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-3-P	Emission unit name: MKW Mill	List any control devices associated with this emission unit: Mist Eliminator SM-3-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Sheet and Strip Mill, used to cold roll alloy strip to smaller gauge.

Manufacturer: Schloeman	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3.8 tons/hr

Maximum Hourly Throughput: 3.8 tons/hr	Maximum Annual Throughput: 33,288 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	3.50
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel (Ni)		
Copper (Cu)		
Chromium (Cr)		
Manganese (Mn)		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
MKW Rolling Mill	SM-3-P	6.68

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-5-P	Emission unit name: CAP Line Salt Bath	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Surface treatment to remove oxides from products.

Manufacturer: Kolene	Model number:	Serial number:
Construction date: 1969	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
20 tons/hr

Maximum Hourly Throughput: 20 tons/hr	Maximum Annual Throughput: 175,200 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,571 SCFH	Type and Btu/hr rating of burners: 6,900,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	789	3,454
Carbon Monoxide (CO)	--	2.4
Nitrogen Oxides (NO _x)	--	1.4
Lead (Pb)	--	1.4E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.22
Total Particulate Matter (TSP)	--	0.22
Sulfur Dioxide (SO ₂)	--	0.02
Volatile Organic Compounds (VOC)	--	0.16
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	6.9E-07
3-Methylchloranthrene	--	5.2E-08
7,12-Dimethylbenz(a)anthracene	--	4.6E-07
Acenaphthene	--	5.2E-08
Acenaphthylene	--	5.2E-08
Anthracene	--	6.9E-08
Benzene	--	6.0E-05
Benzo(a)anthracene	--	5.2E-08
Benzo(a)pyrene	--	3.5E-08
Benzo(b)fluoranthene	--	5.2E-08
Benzo(g,h,i)perylene	--	3.5E-08
Benzo(k)fluoranthene	--	5.2E-08
Chrysene	--	5.2E-08
Dibenzo(a,h)anthracene	--	3.5E-08
Dichlorobenzene	--	3.5E-05
Fluoranthene	--	8.6E-08
Fluorene	--	8.1E-08
Formaldehyde	--	2.2E-03
Hexane	--	0.05
Indenol(1,2,3,c,d)pyrene	--	5.2E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.8E-05
Phenanthrene	--	4.9E-07
Pyrene	--	1.4E-07
Toluene	--	9.8E-05
Arsenic	--	5.8E-06
Beryllium	--	3.5E-07
Cadmium	--	3.2E-05
Chromium	--	4.0E-05
Cobalt	--	2.4E-06
Manganese	--	1.1E-05
Mercury	--	7.5E-06
Nickel	--	6.0E-05
Selenium	--	6.9E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [45CSR§10-11.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit. [45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day. [45CSR§10-3.8.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-6-P	Emission unit name: CAP Preheat Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The furnace is located in the Strip Mill Department on the CAP Line and is used in the preheating process of sheet products. The emissions are vented to indoor air.

Manufacturer: Drever	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 19,048 SCFH	Type and Btu/hr rating of burners: 20,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-7-P	Emission unit name: CAP Equalize Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The furnace is located in the Strip Mill Department on the CAP Line and is used in the process of sheet products. The emissions are vented to indoor air.

Manufacturer: Drever	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 15,714 SCFH	Type and Btu/hr rating of burners: 16,500,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 – R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-10-P	Emission unit name: # 2 CBU Grinder	List any control devices associated with this emission unit: SM-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to surface grind alloy strip.

Manufacturer: Hillacme	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2 tons/hr

Maximum Hourly Throughput: 2 tons/hr	Maximum Annual Throughput: 17,520 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.3E-03
Cobalt	--	4.5E-05
Copper	--	6.9E-05
Manganese	--	2.7E-05
Nickel	--	3.7E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-1-P	Emission unit name: Tumble Blaster	List any control devices associated with this emission unit: TP-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer: OMSG Shotblaster	Model number: Type SG10 H2 Metal Slat Tumblasts	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 119,912 lbs/yr (lbs of steel shot purchased)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.02
Total Particulate Matter (TSP)	--	0.02
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day

[45CSR13 - Permit R13-2532]

13.1.4 Particulate Matter emissions from the Tumble Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

13.1.8. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10-C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532 and 45CSR§13-5.11.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.2. For Baghouse TP-10-C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

13.3.3. Record of Maintenance of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

13.3.4. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-2-P	Emission unit name: Plasma Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the size of large scrap, the plasma cutter cuts the material into smaller pieces.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Cut metal scrap: 5,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X___ No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.20
Total Particulate Matter (TSP)	--	2.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel	--	1.30
Chromium	--	0.57
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Based on testing at Huntington Revert facility measuring net mass lost during plasma cutting. HAPs based on annual average HAP contained in metal processed, as determined from 2008 TRI data.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532]

14.1.2. Emission Point (TP-2-S) - Plasma Cutter PM Emissions. The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.50	1.75
Hazardous Air Pollutants (HAP)	0.43	1.49

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-2-P	Plasma Cutter	5,000	21,900

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532, Condition 5.1.24.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-3-P	Emission unit name: Plasma Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer: Thermal Dynamics	Model number: PAK 45 Plasma Cutter	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.20
Total Particulate Matter (TSP)	--	2.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.57
Nickel	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Plasma Cutter (TP-3P)	0.5	2.19

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Plasma Cutter	Pounds Cut	18,000 pounds per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- b. The pounds of material cut by the plasma cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-4-P	Emission unit name: Arc Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 13,693 #rods/yr (Number of rods used)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.38
Total Particulate Matter (TSP)	--	0.38
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 1 (TP-4P)	0.05	0.21

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	960 per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-5-P	Emission unit name: Arc Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable).

Arc welding unit.

Manufacturer:	Model number:	Serial number:
Construction date: 2006	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 13,693 #rods/yr (Number of rods used)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit TP-4-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit TP-4-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 2 (TP-5P)	0.05	0.21

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	960 per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-6-P	Emission unit name: Cabinet Blaster	List any control devices associated with this emission unit: TP-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer:	Model number:	Serial number:
2002		
Construction date:	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 69,180 lbs/yr (lbs of abrasive product purchased)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Cabinet Blaster (TP-6P)	0.01	0.03

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Cabinet Blasting	Pounds of Shot Used	200 pounds per day

[45CSR13 - Permit R13-2532]

13.1.3 Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

13.1.8. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10-C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532 and 45CSR§13-5.11.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.
[45CSR13 - Permit R13-2532]

13.3.2. For Baghouse TP-10-C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.
[45CSR§30-5.1.c.]

13.3.3. Record of Maintenance of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

13.3.4. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.
For each such case associated with an equipment malfunction, the additional information shall also be recorded:
e. The cause of the malfunction.
f. Steps taken to correct the malfunction.
g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:
a. The amount of shot used in the tumble blaster and cabinet blaster.
[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-7A-P	Emission unit name: Rotary Borings Kiln 1	List any control devices associated with this emission unit: TP-7A-1C, Cyclone TP-7A-2C, Thermal Oxidizer TP-7A-3C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary burn-off kiln heats the scrap metal to vaporize any oils and water present. The clean and dry scrap metal will exit from one end of the rotary kiln while the hot exhaust gases containing vaporized oils and water will exit the kiln at the other end. After exiting the kiln, these exhaust gases will be heated to above 600 °F in a smoke hood in order to prevent condensation of volatilized oils in the ducting system. The smoke hood will provide direct heat to the exhaust stream via a 0.75 MMBtu/hr natural gas burner.

Manufacturer: EnviroAir Inc. (CORECO)	Model number: Model BD-60	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Dirty scrap metal: 8,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: Smoke Hood at 0.75 MMBtu/hr	Type and Btu/hr rating of burners: Smoke Hood: one burner rated at 0.75 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,417
Carbon Monoxide (CO)	--	0.99
Nitrogen Oxides (NO _x)	--	1.20
Lead (Pb)	--	5.9E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)	--	7.1E-03
Volatile Organic Compounds (VOC)	--	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.8E-07
3-Methylchloranthrene	--	2.1E-08
7,12-Dimethylbenz(a)anthracene	--	1.9E-07
Acenaphthene	--	2.1E-08
Acenaphthylene	--	2.1E-08
Anthracene	--	2.8E-08
Benzene	--	2.5E-05
Benzo(a)anthracene	--	2.1E-08
Benzo(a)pyrene	--	1.4E-08
Benzo(b)fluoranthene	--	2.1E-08
Benzo(g,h,i)perylene	--	1.4E-08
Benzo(k)fluoranthene	--	2.1E-08
Chrysene	--	2.1E-08
Dibenzo(a,h)anthracene	--	1.4E-08
Dichlorobenzene	--	1.4E-05
Fluoranthene	--	3.5E-08
Fluorene	--	3.3E-08
Formaldehyde	--	8.9E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	2.1E-08
Naphthalene	--	7.2E-06
Phenanthrene	--	2.0E-07
Pyrene	--	5.9E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	--	4.0E-05
Arsenic	--	2.4E-06
Beryllium	--	1.4E-07
Cadmium	--	1.3E-05
Chromium	--	1.7E-05
Cobalt	--	9.9E-07
Manganese	--	4.5E-06
Mercury	--	3.1E-06
Nickel	--	2.5E-05
Selenium	--	2.8E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and baghouse to be online when Kiln 1 is in operation
TP-7A-2C	Thermal		VOC	99	
TP-7A-3C	Baghouse		PM	99	

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-7A-P	Kiln 1	8,000	35,040

[45CSR13 - Permit R13-2532]

14.1.13. Emission Points TP-7A-P — Kiln 1 Exhaust Controls. The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532]

14.1.15. Emission Points TP-7A-P and TP-8A-P — Kiln Exhaust Emissions. Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Max. Pollutant Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.80	2.46
Nitrogen Oxides (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic	0.80	3.55

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532, Condition 5.1.20.]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shutdown when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.
- g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.4. Commencement of operation. The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.

[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. Proper Maintenance — At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. Continued Operation — Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. Documentation of Need for Improved Monitoring — After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. Excursions — an excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

14.2.10. Quality Improvement Plan (QIP) — Based on the results of a determination made under 40 CFR §64.7(d)(2) (permit condition 14.2.9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

14.5.2. General reporting requirements for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-7B-P	Emission unit name: Rotary Kiln 1 Burners	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary kiln will be indirectly heated by four 0.5 MMBtu/hr natural gas burners. The burners associated with each kiln will have their own exhaust stack to atmosphere, separate from the exhaust from the kilns themselves.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.0 MMBtu/hr	Type and Btu/hr rating of burners: 4 Burners at 0.5 MMBtu/hr each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,031
Carbon Monoxide (CO)	--	0.72
Nitrogen Oxides (NO _x)	--	0.86
Lead (Pb)	--	4.3E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.07
Total Particulate Matter (TSP)	--	0.07
Sulfur Dioxide (SO ₂)	--	5.2E-03
Volatile Organic Compounds (VOC)	--	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.1E-07
3-Methylchloranthrene	--	1.5E-08
7,12-Dimethylbenz(a)anthracene	--	1.4E-07
Acenaphthene	--	1.5E-08
Acenaphthylene	--	1.5E-08
Anthracene	--	2.1E-08
Benzene	--	1.8E-05
Benzo(a)anthracene	--	1.5E-08
Benzo(a)pyrene	--	1.0E-08
Benzo(b)fluoranthene	--	1.5E-08
Benzo(g,h,i)perylene	--	1.0E-08
Benzo(k)fluoranthene	--	1.5E-08
Chrysene	--	1.5E-08
Dibenzo(a,h)anthracene	--	1.0E-08
Dichlorobenzene	--	1.0E-05
Fluoranthene	--	2.6E-08
Fluorene	--	2.4E-08
Formaldehyde	--	6.4E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	1.5E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	5.2E-06
Phenanthrene	--	1.5E-07
Pyrene	--	4.3E-08
Toluene	--	2.9E-05
Arsenic	--	1.7E-06
Beryllium	--	1.0E-07
Cadmium	--	9.4E-06
Chromium	--	1.2E-05
Cobalt	--	7.2E-07
Manganese	--	3.3E-06
Mercury	--	2.2E-06
Nickel	--	1.8E-05
Selenium	--	2.1E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2.0

[45CSR13 - Permit R13-2532]

14.1.12. Emission Points TP-7B-P and TP-8B-P — Kiln Burners — NG Combustion Emissions. Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.20	0.86
Carbon Monoxide (CO)	0.17	0.72

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-8A-P	Emission unit name: Rotary Borings Kiln 2	List any control devices associated with this emission unit: TP-8A-1C, Cyclone TP-8A-2C, Thermal Oxidizer TP-8A-3C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary burn-off kiln heats the scrap metal to vaporize any oils and water present. The clean and dry scrap metal will exit from one end of the rotary kiln while the hot exhaust gases containing vaporized oils and water will exit the kiln at the other end. After exiting the kiln, these exhaust gases will be heated to above 600 °F in a smoke hood in order to prevent condensation of volatilized oils in the ducting system. The smoke hood will provide direct heat to the exhaust stream via a 0.75 MMBtu/hr natural gas burner.

Manufacturer: EnviroAir Inc. (CORECO)	Model number: Model BD-60	Serial number:
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Construction date: 2011	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Dirty scrap metal: 8,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: Smoke Hood at 0.75 MMBtu/hr	Type and Btu/hr rating of burners: Smoke Hood: one burner rated at 0.75 MMBtu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,417
Carbon Monoxide (CO)	--	0.99
Nitrogen Oxides (NO _x)	--	1.20
Lead (Pb)	--	5.9E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)	--	7.1E-03
Volatile Organic Compounds (VOC)	--	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.8E-07
3-Methylchloranthrene	--	2.1E-08
7,12-Dimethylbenz(a)anthracene	--	1.9E-07
Acenaphthene	--	2.1E-08
Acenaphthylene	--	2.1E-08
Anthracene	--	2.8E-08
Benzene	--	2.5E-05
Benzo(a)anthracene	--	2.1E-08
Benzo(a)pyrene	--	1.4E-08
Benzo(b)fluoranthene	--	2.1E-08
Benzo(g,h,i)perylene	--	1.4E-08
Benzo(k)fluoranthene	--	2.1E-08
Chrysene	--	2.1E-08
Dibenzo(a,h)anthracene	--	1.4E-08
Dichlorobenzene	--	1.4E-05
Fluoranthene	--	3.5E-08
Fluorene	--	3.3E-08
Formaldehyde	--	8.9E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	2.1E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	7.2E-06
Phenanthrene	--	2.0E-07
Pyrene	--	5.9E-08
Toluene	--	4.0E-05
Arsenic	--	2.4E-06
Beryllium	--	1.4E-07
Cadmium	--	1.3E-05
Chromium	--	1.7E-05
Cobalt	--	9.9E-07
Manganese	--	4.5E-06
Mercury	--	3.1E-06
Nickel	--	2.5E-05
Selenium	--	2.8E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal		VOC	99	
TP-8A-3C	Baghouse		PM	99	

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-8A-P	Kiln 2	8,000	35,040

[45CSR13 - Permit R13-2532]

14.1.14. Emission Points TP-8A-P — Kiln 2 Exhaust Controls. The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532]

14.1.15. Emission Points TP-7A-P and TP-8A-P — Kiln Exhaust Emissions. Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Max. Pollutant Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.80	2.46
Nitrogen Oxides (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic	0.80	3.55

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532, Condition 5.1.20.]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shutdown when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.
- g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.4. Commencement of operation. The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.
[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. Proper Maintenance — At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. Continued Operation — Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. Documentation of Need for Improved Monitoring — After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. Excursions — an excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

14.2.10. Quality Improvement Plan (QIP) — Based on the results of a determination made under 40 CFR §64.7(d)(2) (permit condition 14.2.9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented. [40 CFR § 64.8; 45CSR§30-5.1.c.]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed. [45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems. [45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

14.5.2. General reporting requirements for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-8B-P	Emission unit name: Rotary Kiln 2 Burners	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary kiln will be indirectly heated by four 0.5 MMBtu/hr natural gas burners. The burners associated with each kiln will have their own exhaust stack to atmosphere, separate from the exhaust from the kilns themselves.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2.0 MM Btu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.0 MMBtu/hr	Type and Btu/hr rating of burners: 4 Burners at 0.5 MMBtu/hr each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,031
Carbon Monoxide (CO)	--	0.72
Nitrogen Oxides (NO _x)	--	0.86
Lead (Pb)	--	4.3E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.07
Total Particulate Matter (TSP)	--	0.07
Sulfur Dioxide (SO ₂)	--	5.2E-03
Volatile Organic Compounds (VOC)	--	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.1E-07
3-Methylchloranthrene	--	1.5E-08
7,12-Dimethylbenz(a)anthracene	--	1.4E-07
Acenaphthene	--	1.5E-08
Acenaphthylene	--	1.5E-08
Anthracene	--	2.1E-08
Benzene	--	1.8E-05
Benzo(a)anthracene	--	1.5E-08
Benzo(a)pyrene	--	1.0E-08
Benzo(b)fluoranthene	--	1.5E-08
Benzo(g,h,i)perylene	--	1.0E-08
Benzo(k)fluoranthene	--	1.5E-08
Chrysene	--	1.5E-08
Dibenzo(a,h)anthracene	--	1.0E-08
Dichlorobenzene	--	1.0E-05
Fluoranthene	--	2.6E-08
Fluorene	--	2.4E-08
Formaldehyde	--	6.4E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	1.5E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	5.2E-06
Phenanthrene	--	1.5E-07
Pyrene	--	4.3E-08
Toluene	--	2.9E-05
Arsenic	--	1.7E-06
Beryllium	--	1.0E-07
Cadmium	--	9.4E-06
Chromium	--	1.2E-05
Cobalt	--	7.2E-07
Manganese	--	3.3E-06
Mercury	--	2.2E-06
Nickel	--	1.8E-05
Selenium	--	2.1E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2.0

[45CSR13 - Permit R13-2532]

14.1.12. Emission Points TP-7B-P and TP-8B-P — Kiln Burners — NG Combustion Emissions. Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.20	0.86
Carbon Monoxide (CO)	0.17	0.72

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-9-P	Emission unit name: Crusher	List any control devices associated with this emission unit: TP-9-C, Electrostatic Precipitator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the metal will be reduced into chips by the crusher.

Manufacturer: American Pulverizer	Model number: 380-HD	Serial number: 8416
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Construction date: 2011	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Metal scrap: 7,040 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.30
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.56
Nickel	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation.

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-9-P	Scrap Metal Crusher	7,040	8,975

[45CSR13 - Permit R13-2532]

14.1.5. Emission Point (TP-9-S) – Crusher PM Controls. The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

14.1.6. Emission Point (TP-9-S) – Crusher PM Emissions. The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	1.75	2.20
Hazardous Air Pollutants	1.49	1.90

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-10-P	Emission unit name: Shot/Tumbler Blaster	List any control devices associated with this emission unit: TP-10-C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycle process, if needed, the scrap metal will be cleaned by the shot blaster which will remove any surface of oxides or surface impurities.

Manufacturer: Wheelabrator	Model number: GN34	Serial number:
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Construction date: 2015	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Metal Scrap: 15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.05
Total Particulate Matter (TSP)	--	0.05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	2.4E-03
Nickel	--	5.8E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Emission factor from data collected at another Special Metals facility.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-10-P	Shot/ Tumble Blaster	15,000	3,000

[45CSR13 - Permit R13-2532]

14.1.10. Emission Point TP-10-P – Shot Blaster PM Controls. The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532]

14.1.11. Emission Point TP-10-P – Shot Blast PM Emissions. Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants	0.04	0.01

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-11-P	Emission unit name: Wash Water Burner	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the quantity of dirt, oil, and grease introduced into the kilns along with the scrap metal, a raw material wash system cleans the metal. The wash water is heated before use by natural gas burners. This burner has a separate exhaust stack.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.83 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 0.83 MMBtu/hr	Type and Btu/hr rating of burners: Eclipse IJ-II high efficiency (>80%) nozzle mixing power burner (0.83 MMBtu/hr).
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	428
Carbon Monoxide (CO)	--	0.30
Nitrogen Oxides (NO _x)	--	0.36
Lead (Pb)	--	1.8E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)	--	2.1E-03
Volatile Organic Compounds (VOC)	--	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	8.6E-08
3-Methylchloranthrene	--	6.4E-09
7,12-Dimethylbenz(a)anthracene	--	5.7E-08
Acenaphthene	--	6.4E-09
Acenaphthylene	--	6.4E-09
Anthracene	--	8.6E-09
Benzene	--	7.5E-06
Benzo(a)anthracene	--	6.4E-09
Benzo(a)pyrene	--	4.3E-09
Benzo(b)fluoranthene	--	6.4E-09
Benzo(g,h,i)perylene	--	4.3E-09
Benzo(k)fluoranthene	--	6.4E-09
Chrysene	--	6.4E-09
Dibenzo(a,h)anthracene	--	4.3E-09
Dichlorobenzene	--	4.3E-06
Fluoranthene	--	1.1E-08
Fluorene	--	1.0E-08
Formaldehyde	--	2.7E-04
Hexane	--	6.4E-03
Indenol(1,2,3,c,d)pyrene	--	6.4E-09

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	2.2E-06
Phenanthrene	--	6.1E-08
Pyrene	--	1.8E-08
Toluene	--	1.2E-05
Arsenic	--	7.1E-07
Beryllium	--	4.3E-08
Cadmium	--	3.9E-06
Chromium	--	5.0E-06
Cobalt	--	3.0E-07
Manganese	--	1.4E-06
Mercury	--	9.3E-07
Nickel	--	7.5E-06
Selenium	--	8.6E-08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-11-P	TP-11-S	Wash Water Burner	0.83

[45CSR13 - Permit R13-2532]

14.1.8. Emission Point (TP-11-S) - Water Wash Burner — NG Combustion Emissions. Emission point (TP-11-S) associated with the Water Wash Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.30

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO2) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-12-P	Emission unit name: Rinse Water Burner	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the quantity of dirt, oil, and grease introduced into the kilns along with the scrap metal, a raw material wash and rinse system cleans the metal. The rinse water is heated before use by natural gas burners. This burner has a separate exhaust stack.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.44 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 0.44 MMBtu/hr	Type and Btu/hr rating of burners: Eclipse IJ-II high efficiency (>80%) nozzle mixing power burner (0.44 MMBtu/hr).
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	227
Carbon Monoxide (CO)	--	0.16
Nitrogen Oxides (NO _x)	--	0.19
Lead (Pb)	--	9.4E-07
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)	--	1.1E-03
Volatile Organic Compounds (VOC)	--	0.01
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	4.5E-08
3-Methylchloranthrene	--	3.4E-09
7,12-Dimethylbenz(a)anthracene	--	3.0E-08
Acenaphthene	--	3.4E-09
Acenaphthylene	--	3.4E-09
Anthracene	--	4.5E-09
Benzene	--	4.0E-06
Benzo(a)anthracene	--	3.4E-09
Benzo(a)pyrene	--	2.3E-09
Benzo(b)fluoranthene	--	3.4E-09
Benzo(g,h,i)perylene	--	2.3E-09
Benzo(k)fluoranthene	--	3.4E-09
Chrysene	--	3.4E-09
Dibenzo(a,h)anthracene	--	2.3E-09
Dichlorobenzene	--	2.3E-06
Fluoranthene	--	5.7E-09
Fluorene	--	5.3E-09
Formaldehyde	--	1.4E-04
Hexane	--	3.4E-03
Indenol(1,2,3,c,d)pyrene	--	3.4E-09

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.2E-06
Phenanthrene	--	3.2E-08
Pyrene	--	9.4E-09
Toluene	--	6.4E-06
Arsenic	--	3.8E-07
Beryllium	--	2.3E-08
Cadmium	--	2.1E-06
Chromium	--	2.6E-06
Cobalt	--	1.6E-07
Manganese	--	7.2E-07
Mercury	--	4.9E-07
Nickel	--	4.0E-06
Selenium	--	4.5E-08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-12-P	TP-12-S	Rinse Water Burner	0.44

[45CSR13 - Permit R13-2532]

14.1.9. Emission Point (TP-12-S) - Rinse Water Burner — NG Combustion Emissions. Emission point (TP-12-S) associated with the Rinse Wash Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-13-P	Emission unit name: Arc Cutter 3	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2013	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 3 (TP-13-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-13-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-15-P	Emission unit name: Arc Cutter 4	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 4 (TP-15-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-15-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-16-P	Emission unit name: Arc Cutter 5	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 5 (TP-16-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-16-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-19-P	Emission unit name: Viking Belt Blaster	List any control devices associated with this emission unit: TP-19-C Internal Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 In the scrap metal recycle process, if needed, the scrap metal will be cleaned by the belt blaster which will remove any surface of oxides or surface impurities.

Manufacturer: Viking	Model number: 600	Serial number:
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Construction date: 2015	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Metal Scrap: 600 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.05	0.19
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	0.01	0.0025
Nickel	0.024	0.006
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emissions Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-19-C	Internal Baghouse	Belt Blaster	PM	99.9	Baghouse to be online when Blaster in Operation

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lbs/hr)	(ton/yr)
TP-19-P	Viking Belt Blaster	600	109.5

[45CSR13 - Permit R13-2532]

14.1.10. Emission Point TP-19-P — Viking Belt Blaster PM Controls. The Baghouse (Control Device TP-19-C) shall be online and good operating condition at all times during the operation of the Belt Blaster (Emission Unit TP-19-P).
[45CSR13 - Permit R13-2532]

14.1.11. Emission Point TP-19-P — Belt Blaster PM Emissions. Emission point (TP-19-S) associated with the Viking Belt Blaster (Emission Unit TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter	0.05	0.19
Hazardous Air Pollutants	0.04	0.01

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Belt Blaster, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Belt Blaster, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VM-2-P	Emission unit name: VIM Mold Preheat	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Vacuum Induction Melting Department, used in the preheating process of rolls. Vents to inside air.

Manufacturer: Electric Furnace	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 5,714 SCFH	Type and Btu/hr rating of burners: 6,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 – R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VM-5-P	Emission unit name: Tundish Drying Oven	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to preheat vessels prior to using with molten alloys.

Manufacturer: Electric Oven	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 1,429 SCFH	Type and Btu/hr rating of burners: 1,500,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

Attachment F
Schedule of Compliance

Schedule of Compliance

The facility is in compliance with all applicable requirements; therefore, a Schedule of Compliance Form is not provided.

Attachment G
Control Devices

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: BW-10-C	List all emission units associated with this control device. BW-10-P, Bar & Wire Mill Scholle Saw
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Manufacturer: Wheelabrator Corp.Uni-Wash, Inc.	Model number: 108-6P	Installation date: MM/DD/2005 Moved
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input checked="" type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & Metals		99.5 %

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

4300 CFM @ 11" SP; 1142 SQ. Ft. Cloth 81 Bags 6" X 108"; 285 Degree F Max. Temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Saw installed before 1970.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: BW-11-C	List all emission units associated with this control device. BW-11-P
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Manufacturer:	Model number:	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-17-C	List all emission units associated with this control device. CD-17-P, East Cutters (3 saws)
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Manufacturer:	Model number:	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-23-C	List all emission units associated with this control device. CD-23-P, CD West Cutters Baghouse
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Manufacturer: Floair	Model number:	Installation date: 1970
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM-Metals		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2919 CFM @ 12.5" S.P.; Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CD-23-P, CD West Cutters Baghouse, is exempt from 45CSR 7-4.1 and is not subject to an emission limit per WVDEP 2008 Fact Sheet.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-36-C	List all emission units associated with this control device. CD-36-P Cold Draw Hard Chrome Plating
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Manufacturer: Vanaire, Inc.	Model number: CH-7321 Chromax R	Installation date: 04/30/1993
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Metals Cr ⁺⁶	100%	

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The Vanaire Chromax chrome removal scrubber is engineered specifically to meet the California emission standard for chrome of 0.006 mg/amp-hr.
 Average flow rate 5940 ft³/min; Maximum flow rate 6279 ft³/min; Average pressure drop 3 inches.
 Scrubbing agent water, continuous make-up to reduce saturation.

The hard chrome plating process at our facility is a "small" hard chrome plating process according to EPA standards. Our maximum potential cumulative rectifier capacity of 5,880,000 amp-hrs/yr. is far below the 60,000,000 amp-hrs/yr small source cutoff.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CD-36-P, Cold Draw Hard Chrome Plating, is subject to 40 C.F.R. Part 63, Subpart N, Chromium Electroplating MACT. This rule was proposed on 12/16/1993. Per 40 CFR 64.2(b)(i), CAM does not apply to emission limits proposed by EPA after 11/15/1990 pursuant to Clean Air Act Section 112 (MACT).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop across the composite mesh-pad system is monitored and recorded each day the process is operating.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-38-C	List all emission units associated with this control device. CD-38-P, Fugitive Ammonia Fumes from West Pickle Tank #11
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Manufacturer: HEIL [®] Process Equipment	Model number: 7311-SP	Installation date: MM/DD/2001
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Ammonium Sulfate (NH ₄) ₂ SO ₄	95%	98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow Rate 50,000 cfm; Average pressure drop 3 inches; Packing Size 3.5 inches' Packing Depth 10 feet; Scrubber Solution pH 2.0 SU Sulfuric Acid; Solution circulation rate 600 gpm;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** West Pickle Tank was installed in 1958.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-40-C	List all emission units associated with this control device. CD-40-P, Centro-Metalcut Type CAC 1220 Abrasive Saw
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Manufacturer: Agent Manufacturing	Model number: FT88-D1 (baghouse) 80SN70-D2 (cyclone)	Installation date: MM/DD/2010
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Cyclone: 28" length, 36" diameter, 6,000 acfm max at 68°F and 14.7 psia

Baghouse: mechanical shaker, 88 bags (5" diameter x 7.5' length), 842 ft² total cloth area, 5.93:1 air to cloth ratio, 5,000 acfm max at 68°F and 14.7 psia

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

Visually inspect control device every 3 months.

Visually inspect baghouse exterior and interior bags for leaks or failure every 30 calendar days.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-1-C	List all emission units associated with this control device. CS-1-P, Schluter Grinder
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Manufacturer: W. W.Sly	Model number: 51-360	Installation date: MM/DD/1964
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-2-C	List all emission units associated with this control device. CS-2-P, Norton Grinder
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Manufacturer: W. W.Sly	Model number: 51-360	Installation date: MM/DD/1964
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-3-C	List all emission units associated with this control device. CS-3-P, #1 Centro-Maskin Grinder
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Manufacturer: W. W. Sly	Model number: 51-360	Installation date: MM/DD/1966
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-4-C	List all emission units associated with this control device. CS-4-P, #2 Centro-Maskin Grinder
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Manufacturer: W. W. Sly	Model number: 51-360	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-1-C1	List all emission units associated with this control device. MS-1D, #4 EAF MS-1B, #5 EAF MS-1A, AOD Reactor MS-1E-P, Wire Feeder
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Manufacturer: Wheelabrator	Model number: 366	Installation date: MM/DD/1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

175,000 cfm; 6" W.C. pressure drop; Reverse Air Cleaning; 864 bags, 11.5" dia. x 30.5 ft. lg.; 79,488 sq. ft. cloth area; air-to-cloth 2.2; 180 deg. F max. temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-1-C2	List all emission units associated with this control device. MS-1D, #4 EAF MS-1B, #5 EAF MS-1A, AOD Reactor MS-1E-P, Wire Feeder
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Manufacturer: Wheelabrator	Model number: 168 Jet III	Installation date: MM/DD/1999
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99.7%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

350,000 cfm; 8" W.C. pressure drop; Pulse Jet Cleaning; 4,104 bags, 6" dia. x 14 ft. lg.; 93,648 sq. ft. cloth area; air-to-cloth 3.75; 180 deg. F temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-2-C	List all emission units associated with this control device. MS-2, Powder Torch
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Manufacturer: Wheelabrator Canada Inc.	Model number: 168 TA-SB, Series 6P	Installation date: MM /DD/1997
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Metal Oxide Fume		1.0 gr/dscf emissions

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow rate 70,000 ACFM; 765 bags; 6" dia. x 168" long; 215°F Max Temp; 4.01 Air to Cloth Ratio

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-9-C	List all emission units associated with this control device. MS-9-P, Lime Storage Silo
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Manufacturer: Carborundum	Model number: 300 CN 2	Installation date: MM/DD/1975
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

1,200 cfm rated ; Shaker Cleaning; 300 sq. ft. cloth area; air-to-cloth 4; ambient temp.; physical size 4 ft x 4 ft x 6 ft ht.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-4-C	List all emission units associated with this control device. PM-4-P, PMD Grit Blaster Machine
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Manufacturer: Pangbourne	Model number: 126 D	Installation date: 1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM-Metals		95.5%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

5880 CFM @ 6" S.P.; 168 Bags x 5" Dia x 126"; Ambient Air

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Pre-controlled potential PM emissions are less than 100 tons per year.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-5-C	List all emission units associated with this control device. PM-5-P, Southeast Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-6-C & PM-25-C	List all emission units associated with this control device. PM-25-P, Southcentral Grinder PM-6-P, Southwest grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-7-C	List all emission units associated with this control device. PM-7-P, Northeast Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-8A-C	List all emission units associated with this control device. PM-8-P, North-West Grinder
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Manufacturer: Mikropul	Model number: 144-12-20 TRMC	Installation date: 08/01/2008
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM (Nickel alloy dust)		>98%
PM (Titanium dust)		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

20,000 ACFM @ 4.5" SP; 144 bags per section; four sections total, three active sections, one cleaning section; Cloth area/section 8144ft² ; Temp. <100°F; Pulse Jet continuous cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit Installed before 1966

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-8B-C	List all emission units associated with this control device. PM-8-P, North-West Grinder
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Manufacturer: U.S. Air Filtration	Model number: 1010-WPT-144-6	Installation date: 08/15/2008
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM (Nickel alloy dust)		>98%
PM (Titanium dust)		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

12,500 cfm @ 5" max S.P. ΔP across bags, Pulse jet , 275 °F maximum operating temperature
 Fan ratio @ 12,500 cfm @ 20" S.P. W.G.
 Total 300 bags (6" x 144") for total cloth (16 oz polyester)
 Area = 5,655 sq ft, 2.21:1 air to cloth ratio

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit Installed before 1966.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-20-C	List all emission units associated with this control device. PM-20-P, PM Plate Plasma Torch
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Manufacturer: American Air Filter	Model number: Model 2	Installation date: 10/15/1989
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dust collector system consists of two hoods which collect the particulate produced from the process operation.
 Flow rate 3600 ft³/min; Average pressure drop 5 inches;
 2.25" X 6' Polyester Bags; Air to cloth ratio 4; filtering area 900 ft²; Pulse Jet cleaning method;
 Temperature is ambient.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-26-C	List all emission units associated with this control device. PM-26-P, North-Central Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft² ; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SC-2-C	List all emission units associated with this control device. SC-2-P, Service Center Saw
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Manufacturer: Uni-Wash, Inc.	Model number: MM-4000	Installation date: MM/DD/1970
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber (Mist)	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Fan 2,000CFM @ 10" SP; Drop-out Box by Airpro; Metal Mesh 24" X 24" X 1" Pre-filter; VEE Bag 10 Pocket Filter — 95% Collapsible Borosilicate Glass; 4" Mist Eliminator Pack

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Saw installed before 1970.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-1-C	List all emission units associated with this control device. SM-1-P, Continuous Anneal & Pickle Line (CAP)
--	--

Manufacturer: HEIL® Process Equipment	Model number: 738	Installation date: 10/01/1984
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Mist Eliminator</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Acid Mist		95% of Mist / 99% Fumes

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow Rate 23,200 cfm; Pressure drop 3 inches; Packing Size 2 inches; Packing Depth 5.5 feet; Scrubber Solution Water; Solution circulation rate 350 gpm;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CAP Line Emissions Unit was installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-2-C	List all emission units associated with this control device. SM-2-P, CAP Line Shot Blaster
--	--

Manufacturer: American Air Filter	Model number: Type N Size 46	Installation date: 1966
---	--	-----------------------------------

Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM- Metals		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

11,000 CFM @ 2.8" S.P. Rotoclone Wet Scrubber. Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

Water level and fan operation monitored continuously. Water level switch checked quarterly and fan operation monitor checked daily.

Daily and monthly inspection of scrubber system in accordance with P/M checklist.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-3-C	List all emission units associated with this control device. SM-3-P, MKW Rolling Mill
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Manufacturer: American Air Filter	Model number: Rotoclone 1656297-7	Installation date: 1967
---	---	-----------------------------------

Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

24" Rotoclone with 20 horsepower, 1775 RPM Motor. Ambient Air Temp

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-10-C	List all emission units associated with this control device. SM-10-P, Strip Mill #2 CBU Grinder
---	---

Manufacturer: Dracco-Fuller	Model number: Mark II	Installation date: 1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM- Metals		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

9,000 CFM @ 14" S.P. Fan; 3.5" Delta P Max; 56 Bags x 139"
 (Returns filtered air to building on outdoors MR 2144) W1damper control

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** SM-10-P, Strip Mill #2 CBU Grinder, is exempt from 45CSR 7-4.1 and is not subject to an emission limit per WVDEP 2008 Fact Sheet.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-7A-1C, Cyclone for Kiln 1	List all emission units associated with this control device. TP-7A-P , Rotary Borings Kiln 1
---	--

Manufacturer: EnviroAir Inc.	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dry cyclone
 3,000 acfm at 350 °F

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Cyclone will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:

 TP-7A-2C
 Thermal Oxidizer for Kiln 1

List all emission units associated with this control device.

TP-7A-P, Rotary Borings Kiln 1

Manufacturer:

 Enviro Air, Inc. thermal oxidizer,
 Maxon Kinemax Burner

Model number:

Unknown

Installation date:

MM/DD/2011

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input checked="" type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2.0 MM Btu/hr natural gas burner
 Typical combustion chamber temperature approximately 1,400 °F
 Minimum combustion chamber retention time of 0.6 seconds.
 Maximum loading of 80 lbs/hr of organics.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.
 If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
 Continuous measurement and recording of temperature. Temperature checked daily.
 Annual validation of accuracy of thermocouple.
 Shutdown of the kiln system if it operates below 1,200 °F for 60 minutes or more

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-7A-3C Baghouse for Kiln 1	List all emission units associated with this control device. TP-7A-P, Rotary Borings Kiln 1
---	---

Manufacturer: Donaldson Dalamatic	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
---	-------------------------------------	---

Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm gas flow at 350 °F and -0.72 psia
 Pulse jet, 645 ft² total cloth area

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse exterior and interior bags will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-1C, Cyclone for Kiln 2	List all emission units associated with this control device. TP-8A-P , Rotary Borings Kiln 2
---	--

Manufacturer: EnviroAir Inc.	Model number: Unknown	Installation date: MM/DD/2011
--	---------------------------------	---

Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dry cyclone
 3,000 acfm at 350 °F

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Cyclone will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-2C Thermal Oxidizer for Kiln 2	List all emission units associated with this control device. TP-8A-P, Rotary Borings Kiln 2
---	---

Manufacturer: Enviro Air, Inc. thermal oxidizer, Maxon Kinemax Burner	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2.0 MMBtu/hr natural gas burner
 Typical combustion chamber temperature approximately 1,400 °F
 Minimum combustion chamber retention time of 0.6 seconds.
 Maximum loading of 80 lbs/hr of organics.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.
 If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
 Continuous measurement and recording of temperature. Temperature checked daily.
 Annual validation of accuracy of thermocouple.
 Shutdown of the kiln system if it operates below 1,200 °F for 60 minutes or more.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-3C Baghouse for Kiln 2	List all emission units associated with this control device. TP-8A-P, Rotary Borings Kiln 2
---	---

Manufacturer: Donaldson Dalamatric	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm gas flow at 350 °F and -0.72 psia
 Pulse jet, 645 ft² total cloth area

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-9-C Electrostatic Precipitator	List all emission units associated with this control device. TP-9-P, Crusher
--	--

Manufacturer: Horizon International	Model number: SEM.132	Installation date: MM/DD/2011
---	---------------------------------	---

Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input checked="" type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		88.3%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,200 acfm flow rate, 6 feet/second velocity, 0.4 in H₂O pressure drop
 12 Flat plate electrodes, 5 ft verticle height, and 1,560 ft² active collecting surface
 Manual plate cleaning system

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

ESP will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
TP-10-C

List all emission units associated with this control device.
TP-1-P, Tumble Blaster (Thistle Processing)
TP-6-P, Cabinet Blaster (Thistle Processing)
TP-10-P, Shot/Tumble Blaster (Scrap Metal Recycling)

Manufacturer:
Donaldson Dalamatic

Model number:
DLMC 1/4/15

Installation date:
MM/DD/2011

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm at 350 °F and -0.72 psia
Closed suction, Pulse jet, Total cloth area of 645 ft²

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Differential pressure controller will be monitored.

Baghouse exterior and interior bags will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-19-C Internal Baghouse	List all emission units associated with this control device. TP-19-P Viking Belt Blaster
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Manufacturer: Viking	Model number: 9-PDC	Installation date: MM/DD/2016
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Closed suction, filter cartridge and Pulse jet
 Air consumption is 1.2cubic ft per min @90psi

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

Attachment H
Compliance Assurance Monitoring Forms

Attachment H

Compliance Assurance Monitoring

The facility currently has approved compliance assurance (CAM) plans for the following control devices:

- Rotary Borings Kiln 1 Thermal Oxidizer (TP-7A-2C)
- Rotary Borings Kiln 2 Thermal Oxidizer (TP-8A-2C)
- Strip Mill Wet Scrubber (SM-2-C)
- Melt Shop Baghouses (MS-1-C1, MS-1-C2, MS-2-C)

Since CAM does not apply to any other control devices, no CAM forms have been provided.



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Huntington Alloys Corporation; Huntington, WV - Title V Air Permit Renewal Application, R30-01100007

1 message

Felty, Roger <Roger.Felty@arcadis.com>

Thu, May 25, 2023 at 3:32 PM

To: "DEPAirQualityPermitting@wv.gov" <DEPAirQualityPermitting@wv.gov>

Cc: Dan Roberts <daniel.p.roberts@wv.gov>, Tom Bell <tom.bell@specialmetals.com>, "mporter@specialmetals.com" <mporter@specialmetals.com>, "Patton, Kevin" <Kevin.Patton@arcadis.com>, "Rota, Casey" <Casey.Rota@arcadis.com>, "Uhall, Justin" <Justin.Uhall@arcadis.com>

To Whom it May Concern:

Attached please find the application for renewal of the Huntington Alloys Corporation Title V air permit.

Also attached is the email cover letter as required by WVDEP.

If you have any questions on the renewal package, please contact Tom Bell (tom.bell@specialmetals.com, 304-526-5228) or Roger Felty (roger.felty@arcadis.com, 720-409-0288)

Thank you,

Roger Felty

Roger Felty
Principal Air Quality Consultant
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www.arcadis.com



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3 attachments



 **1 - HAC Email Cover Letter.pdf**
567K

 **Huntington Alloys Title V Renewal Application Package 05-2023.pdf**
7424K



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Title V application renewal work - Huntington Alloys - CAM question

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Mon, May 22, 2023 at 8:46 AM

Dan,

I agree with what you have told him regarding CAM applicability with one exception. The exemption from CAM for NSPS and MACT is an exemption from that NSPS and MACT standard and not an exemption for the equipment. For example, a dehydration unit with a flare could have VOC limits under NSR and also be subject to MACT subpart HH for HAPs. You would have to review the equipment as a PSEU because of VOC emissions, but not because of the HAP limitations under the MACT.

There isn't any construction date under the CAM rule which exempts equipment from CAM review. I haven't looked at their Title V renewal applications, so I'm not sure why they used this justification. The only thing I can think of is if equipment was installed prior to the minor NSR program and there were no other state requirements that applied, they might not be subject to CAM because they don't have an emission limitation or standard. It's a strange approach to justify that CAM does not apply, but could this be what was meant?

Carrie

On Mon, May 22, 2023 at 8:24 AM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

Carrie,

Good morning. I have been trying to help out Roger Felty with the CAM justification as he is preparing the renewal application. Can you read through the emails below and make sure I didn't miss anything? Any advice?

Thanks,
Dan

----- Forwarded message -----

From: **Felty, Roger** <Roger.Felty@arcadis.com>

Date: Sun, May 21, 2023 at 10:28 AM

Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

To: Roberts, Daniel P <daniel.p.roberts@wv.gov>

Cc: Tom Bell <tom.bell@specialmetals.com>, Uhall, Justin <Justin.Uhall@arcadis.com>, Rota, Casey <Casey.Rota@arcadis.com>, Patton, Kevin <Kevin.Patton@arcadis.com>

Hi Dan,

Thanks for sending this information on a Saturday. We really appreciate it.

Since the 2008, 2013, and 2018 renewal applications all noted the non-applicability of Compliance Assurance Monitoring (CAM) to many of the Huntington Alloys control devices based on some type of date criteria before 1974, it seems that WVDEP agreed with that rationale in past years.

It sounds like there could be some basis that equipment installed before a certain date (1974?) is grandfathered and not subject to CAM/R13?

In the interest of submitting the renewal application on time, by next Saturday, May 27, we will complete as many of the CAM justifications for the Attachment G Control Device forms as we can. Control device forms with the date-related justifications we'd like to work through with you during the application review process.

Thanks again for your help on this.

We look forward to working with you on the permit renewal.

Take care,

Roger

PS I'm away from work Monday and Tuesday. Please copy all above in any replies. Thanks.

Roger Felty

Principal Air Quality Consultant
Arcadis U.S., Inc.
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roger.felty@arcadis.com
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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Saturday, May 20, 2023 1:56 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

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Dan

On Fri, May 19, 2023 at 10:23 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

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Is it possible to get copies of the control devices sections from the 2008 and 2013 renewal applications today or Monday?

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I'm just thinking that the 2008 and 2013 controls docs might have better justification re: CAM applicability than what we're working with from the 2018 forms.

We're getting down to the wire on the submittal date and this CAM issue is the last thing we need to pin down.

I appreciate all your help and apologize for my short notice request on the 2008 and 2013 info.

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Roger

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From: Felty, Roger
Sent: Friday, April 28, 2023 3:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

Thanks, Dan.

You have a good weekend as well!

Roger

From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Friday, April 28, 2023 2:36 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Hey Roger,

From what I have read, I believe that the CAM requirements apply to PSEU's that are subject to either a state *OR* federal emission limitation or standard. I am not 100% sure, so I will consult with someone on Monday and get back to you. Both of the people I wish to contact are off on Fridays.

Have a great weekend!

Dan

On Thu, Apr 27, 2023 at 5:15 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Thanks for sleuthing through the state files and for the detailed information.

Since CAM is a federal rule, am I correct in assuming that the emission limitation or standard a source is subject to would also have to be a federal standard?

And if a source is only subject to a state emission limitation/standard, then CAM would not apply?

Is this correct?

Thanks,

Roger

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Roger,

Hey. I have finally been able to review the CAM rule and various other supporting documents and the 2018 files in addition to all of the other renewals and the initial permit. I have also spoken at length with a co-worker.

To answer your question, there is no exemption from the CAM Rule based on a piece of equipment's date of installation/construction. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) that meets a three-part test. The PSEU must:

- a. be subject to an emission limitation or standard, and
- b. use a control device to achieve compliance, and
- c. have pre-control emissions that exceed or are equivalent to the major source threshold.

Note that the term "control device" means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The term "control device" does not include passive methods such as lids or seals or inherent process equipment provided for safety or material recovery.

Each of these three conditions must apply to the PSEU. So, the first step is to look at these three conditions and if one or more of them do not apply, then that should be what is listed as to why the CAM requirements do not apply to that PSEU and its control device.

<refer to Question 3 in the *Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule* found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

There are some kinds of equipment excluded from the CAM rule. The following PSEUs are excluded:

- a. those subject to 111 or 112 standards promulgated after 11/15/90, since those standards have been and will be designed with monitoring that provides a reasonable assurance of compliance;
- b. those subject to the acid rain program, emissions trading programs such as the acid rain program, emissions caps like those provided in the Intel P4 permit, or continuous compliance determination methods, i.e., where a regulatory requirement specifies a monitoring method for compliance, because CAM is believed to be redundant for these units [note that permitting authorities should ensure that these units have or get monitoring sufficient for trading emission credits in the proper currency]

c. certain municipally-owned utility units, as defined in 40 CFR 72.2, that produce electricity during periods of peak electrical demand or emergency situations since these periods or situations are infrequent.

<refer to Question 4 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

Another good reference document is the Technical Guidance Document: Compliance Assurance Monitoring found at <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

A CAM plan was submitted with the first renewal application submitted in 2008. I have attached the associated Fact Sheet where the CAM Plan discussion can be found under Determinations and Justifications and in part reads as follows:

"#4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), the Wire Feeder (MS-1E), the Powder Torch (MS-2), and the Cap Line Shot Blaster (SM-2P) have pre-controlled potential emissions that exceed major source thresholds for particulate matter (PM). Each unit is subject to a PM standard and is equipped with a control device that is used to comply with federally-enforceable emission limits associated with their operation. Therefore each unit represents a pollutant specific emissions unit (PSEU) for PM. The submitted plans meet the requirements of the CAM rule.

Emissions from the #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), and the Wire Feeder (MS-1E) are controlled by baghouses MS-1-C1 and MS-1-C2. In accordance with 40 CFR § 64.4.(f), one CAM plan was submitted for these PSEUs. Emissions from the Powder Torch (MS-2) are controlled by baghouse MS-2-C."

Unfortunately, the original CAM Plan in its entirety as submitted in 2008 can only be found in paper form in the file room at the DEP headquarters in Kanawha City.

In reviewing the 2018 renewal application, of all of the Air Pollution Control Device Forms included in Attachment G, there were 11 which checked the "No" box in regards to being subject to the CAM requirements of 40 C.F.R. 64, but no justification was provided. These can be found on pages 353 (PM-20-C, baghouse), 357 (SM-4-C, fan), 364 (BW-11-C, baghouse), 368 (CD-40-C, baghouse/single cyclone), 370 (TP-7A-1C, single cyclone), 372 (TP-7A-3C, baghouse), 373 (TP-8A-1C, single cyclone), 375 (TP-8A-3C, baghouse), 376 (TP-9-C, dry plate ESP), 377 (TP-10-C, baghouse) and 378 (TP-19-C, baghouse).

There were two Air Pollution Control Device Forms which checked the "Yes" box in regards to being subject to the CAM requirements of 40 C.F.R. 64. They were on pages 371 (TP-7A-2C, thermal oxidizer for Kiln 1) and 374 (TP-82-2C, thermal oxidizer for Kiln 2). I'm not sure why these were checked for the CAM rules since the write up in the 2008 Fact Sheet referenced PM and baghouses.

I know it's a long email, but I wanted to include everything I had read and discovered so far.

Please respond with any further questions.

Sincerely,

Dan

On Wed, Apr 26, 2023 at 8:08 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Any news on this?

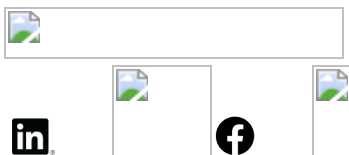
I appreciate any help your team can provide for us.

Thanks,

Roger

Roger Felty
Principal Air Quality Consultant
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T +1 720 409 0288

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www.arcadis.com



From: Felty, Roger
Sent: Thursday, April 20, 2023 1:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

Hi Dan,

Thank you! I appreciate it.

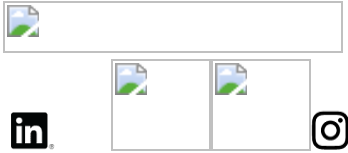
Take care,

Roger

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Upcoming PTO Friday, April 21, and Monday, April 24



From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Thursday, April 20, 2023 1:42 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Good afternoon. I started researching this yesterday, but don't have any answers yet. I actually took vacation today, but just logged on to check things. I hope to get back to you with some answers tomorrow.

Dan

On Thu, Apr 20, 2023 at 3:28 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Any thoughts on these somewhat mysterious CAM exempt dates?

Thanks,

Roger

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www.arcadis.com

Upcoming PTO Friday, April 21, and Monday, April 24



From: Felty, Roger
Sent: Wednesday, April 12, 2023 8:19 AM
To: daniel.p.roberts@wv.gov
Cc: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Title V application renewal work - Huntington Alloys - CAM question

Hi Dan,

I'm working with Melissa on the Huntington Alloys air permit renewal application.

As you've requested in emails with Melissa, we are working to provide CAM applicability justifications on the Attachment G control device forms.

We're working from the 2018 renewal forms as our 'go-by' and I have a question on a recurring type of statement that appears on several of the 2018 forms.

Several 2018 control device forms say CAM doesn't apply because the emission unit served by the control device was installed before 1966, 1970, or 1974. Or the form says the unit was installed in 1962.

What is the significance of these dates in regards to being exempt from CAM?

We want to be sure to provide proper CAM justification in the renewal application.

We'd appreciate any insight you can provide on this issue.

Thanks,

Roger

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Dan

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Roger Felty

Principal Air Quality Consultant
Arcadis U.S., Inc.
T +1 720 409 0288

roger.felty@arcadis.com
www.arcadis.com



From: Felty, Roger

Sent: Thursday, April 20, 2023 1:55 PM

To: Roberts, Daniel P <daniel.p.roberts@wv.gov>

Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

Hi Dan,

Thank you! I appreciate it.

Take care,

Roger

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Upcoming PTO Friday, April 21, and Monday, April 24



From: Roberts, Daniel P <daniel.p.roberts@wv.gov>

Sent: Thursday, April 20, 2023 1:42 PM

To: Felty, Roger <Roger.Felty@arcadis.com>

Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Good afternoon. I started researching this yesterday, but don't have any answers yet. I actually took vacation today, but just logged on to check things. I hope to get back to you with some answers tomorrow.

Dan

On Thu, Apr 20, 2023 at 3:28 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

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Any thoughts on these somewhat mysterious CAM exempt dates?

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From: Felty, Roger
Sent: Wednesday, April 12, 2023 8:19 AM
To: daniel.p.roberts@wv.gov
Cc: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Title V application renewal work - Huntington Alloys - CAM question

Hi Dan,

I'm working with Melissa on the Huntington Alloys air permit renewal application.

As you've requested in emails with Melissa, we are working to provide CAM applicability justifications on the Attachment G control device forms.

We're working from the 2018 renewal forms as our 'go-by' and I have a question on a recurring type of statement that appears on several of the 2018 forms.

Several 2018 control device forms say CAM doesn't apply because the emission unit served by the control device was installed before 1966, 1970, or 1974. Or the form says the unit was installed in 1962.

What is the significance of these dates in regards to being exempt from CAM?

We want to be sure to provide proper CAM justification in the renewal application.

We'd appreciate any insight you can provide on this issue.

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2 attachments



Final Huntington Renewal Application.pdf
10575K



Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Title V application renewal work - Huntington Alloys - CAM question

1 message

Felty, Roger <Roger.Felty@arcadis.com>

Sun, May 21, 2023 at 10:28 AM

To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Cc: Tom Bell <tom.bell@specialmetals.com>, "Uhall, Justin" <Justin.Uhall@arcadis.com>, "Rota, Casey" <Casey.Rota@arcadis.com>, "Patton, Kevin" <Kevin.Patton@arcadis.com>

Hi Dan,

Thanks for sending this information on a Saturday. We really appreciate it.

Since the 2008, 2013, and 2018 renewal applications all noted the non-applicability of Compliance Assurance Monitoring (CAM) to many of the Huntington Alloys control devices based on some type of date criteria before 1974, it seems that WVDEP agreed with that rationale in past years.

It sounds like there could be some basis that equipment installed before a certain date (1974?) is grandfathered and not subject to CAM/R13?

In the interest of submitting the renewal application on time, by next Saturday, May 27, we will complete as many of the CAM justifications for the Attachment G Control Device forms as we can. Control device forms with the date-related justifications we'd like to work through with you during the application review process.

Thanks again for your help on this.

We look forward to working with you on the permit renewal.

Take care,

Roger

PS I'm away from work Monday and Tuesday. Please copy all above in any replies. Thanks.

Roger Felty
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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Saturday, May 20, 2023 1:56 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Hey. I took vacation yesterday and was just checking my emails today. I have attached a copy of the 2013 renewal application. I had looked at it previously and the CAM justifications were the same as in the 2018 application. The 2008 renewal application had each form saved individually in Word. I checked some of them and they seemed to have the same justifications listed as the 2013 and 2018 renewal applications. Let me know if you have some specific control devices you want to look at and I will pick them out and email them to you. Let me know what you think after you have had a chance to review them.

Dan

On Fri, May 19, 2023 at 10:23 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

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Is it possible to get copies of the control devices sections from the 2008 and 2013 renewal applications today or Monday?

I don't know if that information was in Attachment G back then, but whichever sections provide the controls info and hopefully CAM info too.

I'm just thinking that the 2008 and 2013 controls docs might have better justification re: CAM applicability than what we're working with from the 2018 forms.

We're getting down to the wire on the submittal date and this CAM issue is the last thing we need to pin down.

I appreciate all your help and apologize for my short notice request on the 2008 and 2013 info.

Thanks,

Roger

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From: Felty, Roger
Sent: Friday, April 28, 2023 3:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

Thanks, Dan.

You have a good weekend as well!

Roger

From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Friday, April 28, 2023 2:36 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Hey Roger,

From what I have read, I believe that the CAM requirements apply to PSEU's that are subject to either a state *OR* federal emission limitation or standard. I am not 100% sure, so I will consult with someone on Monday and get back to you. Both of the people I wish to contact are off on Fridays.

Have a great weekend!

Dan

On Thu, Apr 27, 2023 at 5:15 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Thanks for sleuthing through the state files and for the detailed information.

Since CAM is a federal rule, am I correct in assuming that the emission limitation or standard a source is subject to would also have to be a federal standard?

And if a source is only subject to a state emission limitation/standard, then CAM would not apply?

Is this correct?

Thanks,

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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Thursday, April 27, 2023 1:31 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Hey. I have finally been able to review the CAM rule and various other supporting documents and the 2018 files in addition to all of the other renewals and the initial permit. I have also spoken at length with a co-worker.

To answer your question, there is no exemption from the CAM Rule based on a piece of equipment's date of installation/construction. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) that meets a three-part test. The PSEU must:

- a. be subject to an emission limitation or standard, and
- b. use a control device to achieve compliance, and

c. have pre-control emissions that exceed or are equivalent to the major source threshold.

Note that the term "control device" means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The term "control device" does not include passive methods such as lids or seals or inherent process equipment provided for safety or material recovery.

Each of these three conditions must apply to the PSEU. So, the first step is to look at these three conditions and if one or more of them do not apply, then that should be what is listed as to why the CAM requirements do not apply to that PSEU and its control device.

<refer to Question 3 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

There are some kinds of equipment excluded from the CAM rule. The following PSEUs are excluded:

- a. those subject to 111 or 112 standards promulgated after 11/15/90, since those standards have been and will be designed with monitoring that provides a reasonable assurance of compliance;
- b. those subject to the acid rain program, emissions trading programs such as the acid rain program, emissions caps like those provided in the Intel P4 permit, or continuous compliance determination methods, i.e., where a regulatory requirement specifies a monitoring method for compliance, because CAM is believed to be redundant for these units [note that permitting authorities should ensure that these units have or get monitoring sufficient for trading emission credits in the proper currency]
- c. certain municipally-owned utility units, as defined in 40 CFR 72.2, that produce electricity during periods of peak electrical demand or emergency situations since these periods or situations are infrequent.

<refer to Question 4 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

Another good reference document is the Technical Guidance Document: Compliance Assurance Monitoring found at <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

A CAM plan was submitted with the first renewal application submitted in 2008. I have attached the associated Fact Sheet where the CAM Plan discussion can be found under Determinations and Justifications and in part reads as follows:

"#4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), the Wire Feeder (MS-1E), the Powder Torch (MS-2), and the Cap Line Shot Blaster (SM-2P) have pre-controlled potential emissions that exceed major source thresholds for particulate matter (PM). Each unit is subject to a PM standard and is equipped with a control device that is used to comply with federally-enforceable emission limits associated with their operation. Therefore each unit represents a pollutant specific emissions unit (PSEU) for PM. The submitted plans meet the requirements of the CAM rule.

Emissions from the #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), and the Wire Feeder (MS-1E) are controlled by baghouses MS-1-C1 and MS-1-C2. In accordance with 40 CFR § 64.4. (f), one CAM plan was submitted for these PSEUs. Emissions from the Powder Torch (MS-2) are controlled by baghouse MS-2-C."

Unfortunately, the original CAM Plan in its entirety as submitted in 2008 can only be found in paper form in the file room at the DEP headquarters in Kanawha City.

In reviewing the 2018 renewal application, of all of the Air Pollution Control Device Forms included in Attachment G, there were 11 which checked the "No" box in regards to being subject to the CAM requirements of 40 C.F.R. 64, but no justification was provided. These can be found on pages 353 (PM-20-C, baghouse), 357 (SM-4-C, fan), 364 (BW-11-C, baghouse), 368 (CD-40-C, baghouse/single cyclone), 370 (TP-7A-1C, single cyclone), 372 (TP-7A-3C, baghouse), 373 (TP-8A-1C, single cyclone), 375 (TP-8A-3C, baghouse), 376 (TP-9-C, dry plate ESP), 377 (TP-10-C, baghouse) and 378 (TP-19-C, baghouse).

There were two Air Pollution Control Device Forms which checked the "Yes" box in regards to being subject to the CAM requirements of 40 C.F.R. 64. They were on pages 371 (TP-7A-2C, thermal oxidizer for Kiln 1) and 374 (TP-82-2C, thermal oxidizer for Kiln 2). I'm not sure why these were checked for the CAM rules since the write up in the 2008 Fact Sheet referenced PM and baghouses.

I know it's a long email, but I wanted to include everything I had read and discovered so far.

Please respond with any further questions.

Sincerely,

Dan

On Wed, Apr 26, 2023 at 8:08 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Any news on this?

I appreciate any help your team can provide for us.

Thanks,

Roger

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From: Felty, Roger
Sent: Thursday, April 20, 2023 1:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

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2 attachments



Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Title V application renewal work - Huntington Alloys - CAM question

1 message

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Emissions from the #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), and the Wire Feeder (MS-1E) are controlled by baghouses MS-1-C1 and MS-1-C2. In accordance with 40 CFR § 64.4. (f), one CAM plan was submitted for these PSEUs. Emissions from the Powder Torch (MS-2) are controlled by baghouse MS-2-C."

Unfortunately, the original CAM Plan in its entirety as submitted in 2008 can only be found in paper form in the file room at the DEP headquarters in Kanawha City.

In reviewing the 2018 renewal application, of all of the Air Pollution Control Device Forms included in Attachment G, there were 11 which checked the "No" box in regards to being subject to the CAM requirements of 40 C.F.R. 64, but no justification was provided. These can be found on pages 353 (PM-20-C, baghouse), 357 (SM-4-C, fan), 364 (BW-11-C, baghouse), 368 (CD-40-C, baghouse/single cyclone), 370 (TP-7A-1C, single cyclone), 372 (TP-7A-3C,

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I know it's a long email, but I wanted to include everything I had read and discovered so far.

Please respond with any further questions.

Sincerely,

Dan

On Wed, Apr 26, 2023 at 8:08 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Any news on this?

I appreciate any help your team can provide for us.

Thanks,

Roger

Roger Felty
Principal Air Quality Consultant
Arcadis U.S., Inc.
T +1 720 409 0288

roger.felty@arcadis.com
www.arcadis.com



From: Felty, Roger
Sent: Thursday, April 20, 2023 1:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

Hi Dan,

Thank you! I appreciate it.

Take care,

Roger

Roger Felty

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Upcoming PTO Friday, April 21, and Monday, April 24



From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Thursday, April 20, 2023 1:42 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Good afternoon. I started researching this yesterday, but don't have any answers yet. I actually took vacation today, but just logged on to check things. I hope to get back to you with some answers tomorrow.

Dan

On Thu, Apr 20, 2023 at 3:28 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

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Any thoughts on these somewhat mysterious CAM exempt dates?

Thanks,

Roger

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Upcoming PTO Friday, April 21, and Monday, April 24



From: Felty, Roger
Sent: Wednesday, April 12, 2023 8:19 AM
To: daniel.p.roberts@wv.gov
Cc: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Title V application renewal work - Huntington Alloys - CAM question

Hi Dan,

I'm working with Melissa on the Huntington Alloys air permit renewal application.

As you've requested in emails with Melissa, we are working to provide CAM applicability justifications on the Attachment G control device forms.

We're working from the 2018 renewal forms as our 'go-by' and I have a question on a recurring type of statement that appears on several of the 2018 forms.

Several 2018 control device forms say CAM doesn't apply because the emission unit served by the control device was installed before 1966, 1970, or 1974. Or the form says the unit was installed in 1962.

What is the significance of these dates in regards to being exempt from CAM?

We want to be sure to provide proper CAM justification in the renewal application.

We'd appreciate any insight you can provide on this issue.

Thanks,

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 **Final Huntington Renewal Application.pdf**
10575K



Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Title V application renewal work - Huntington Alloys - CAM question

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Fri, May 19, 2023 at 10:22 AM

Hi Dan,

I have a follow up question on Huntington's control device info.

Is it possible to get copies of the control devices sections from the 2008 and 2013 renewal applications today or Monday?

I don't know if that information was in Attachment G back then, but whichever sections provide the controls info and hopefully CAM info too.

I'm just thinking that the 2008 and 2013 controls docs might have better justification re: CAM applicability than what we're working with from the 2018 forms.

We're getting down to the wire on the submittal date and this CAM issue is the last thing we need to pin down.

I appreciate all your help and apologize for my short notice request on the 2008 and 2013 info.

Thanks,

Roger

Roger Felty
Principal Air Quality Consultant
Arcadis U.S., Inc.
T +1 720 409 0288

roger.felty@arcadis.com
www.arcadis.com



From: Felty, Roger
Sent: Friday, April 28, 2023 3:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

Thanks, Dan.

You have a good weekend as well!

Roger

From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Friday, April 28, 2023 2:36 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Hey Roger,

From what I have read, I believe that the CAM requirements apply to PSEU's that are subject to either a state *OR* federal emission limitation or standard. I am not 100% sure, so I will consult with someone on Monday and get back to you. Both of the people I wish to contact are off on Fridays.

Have a great weekend!

Dan

On Thu, Apr 27, 2023 at 5:15 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Thanks for sleuthing through the state files and for the detailed information.

Since CAM is a federal rule, am I correct in assuming that the emission limitation or standard a source is subject to would also have to be a federal standard?

And if a source is only subject to a state emission limitation/standard, then CAM would not apply?

Is this correct?

Thanks,

Roger

Roger Felty

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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Thursday, April 27, 2023 1:31 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Hey. I have finally been able to review the CAM rule and various other supporting documents and the 2018 files in addition to all of the other renewals and the initial permit. I have also spoken at length with a co-worker.

To answer your question, there is no exemption from the CAM Rule based on a piece of equipment's date of installation/construction. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) that meets a three-part test. The PSEU must:

- a. be subject to an emission limitation or standard, and
- b. use a control device to achieve compliance, and
- c. have pre-control emissions that exceed or are equivalent to the major source threshold.

Note that the term "control device" means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The term "control device" does not include passive methods such as lids or seals or inherent process equipment provided for safety or material recovery.

Each of these three conditions must apply to the PSEU. So, the first step is to look at these three conditions and if one or more of them do not apply, then that should be what is listed as to why the CAM requirements do not apply to that PSEU and its control device.

<refer to Question 3 in the *Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule* found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

There are some kinds of equipment excluded from the CAM rule. The following PSEUs are excluded:

- a. those subject to 111 or 112 standards promulgated after 11/15/90, since those standards have been and will be designed with monitoring that provides a reasonable assurance of compliance;
- b. those subject to the acid rain program, emissions trading programs such as the acid rain program, emissions caps like those provided in the Intel P4 permit, or continuous compliance determination methods, i.e., where a regulatory requirement specifies a monitoring method for compliance, because CAM is believed to be redundant for these units [note that permitting authorities should ensure that these units have or get monitoring sufficient for trading emission credits in the proper currency]
- c. certain municipally-owned utility units, as defined in 40 CFR 72.2, that produce electricity during periods of peak electrical demand or emergency situations since these periods or situations are infrequent.

<refer to Question 4 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

Another good reference document is the Technical Guidance Document: Compliance Assurance Monitoring found at <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

A CAM plan was submitted with the first renewal application submitted in 2008. I have attached the associated Fact Sheet where the CAM Plan discussion can be found under Determinations and Justifications and in part reads as follows:

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Sent: Thursday, April 20, 2023 1:55 PM
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

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Sent: Wednesday, April 12, 2023 8:19 AM
To: daniel.p.roberts@wv.gov
Cc: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Title V application renewal work - Huntington Alloys - CAM question

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Huntington Alloys renewal application - submittal process

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Wed, May 10, 2023 at 7:49 PM

Hi Dan,

Thanks for confirming no fee.

Take care,

Roger

Roger Felty
Principal Air Quality Consultant
Arcadis U.S., Inc.
T +1 720 409 0288

roger.felty@arcadis.com
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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Wednesday, May 10, 2023 9:31 AM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Huntington Alloys renewal application - submittal process

Hey Roger,

Just wanted to follow up with you and confirm that there are no application fees for R30 Title V operating permit renewals (or initials, minor modifications, significant modifications, etc.). There are application fees associated with R13 pre-construction applications, which may also request a corresponding R30 Title V modification.

Hope this answers your question. Let me know if anything else pops up.

Dan

On Fri, May 5, 2023 at 12:52 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Thanks, Dan.

I'm available then.

Roger

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Subject: Re: Huntington Alloys renewal application - submittal process

Hi Roger,

I'll try to give you a call around 11:00 am MT. Just respond if anything changes because I am pretty flexible today.

Dan

On Fri, May 5, 2023 at 11:17 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

I just left a vm for you.

If you have time today, I'd like to chat about the application submittal process to make sure we get things right on our end.

I should be available today except these time: 9:30 - 10:30 AM, 1 - 1:30 PM, and 2 - 2:30 PM Mountain time. (I forgot about that 2 PM call when I left my message...)

Thanks,
Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Huntington Alloys renewal application - submittal process

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Thanks,
Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Huntington Alloys renewal application - submittal process

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Fri, May 5, 2023 at 12:52 PM

Thanks, Dan.

I'm available then.

Roger

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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Friday, May 5, 2023 9:31 AM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Huntington Alloys renewal application - submittal process

Hi Roger,

I'll try to give you a call around 11:00 am MT. Just respond if anything changes because I am pretty flexible today.

Dan

On Fri, May 5, 2023 at 11:17 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

I just left a vm for you.

If you have time today, I'd like to chat about the application submittal process to make sure we get things right on our end.

I should be available today except these time: 9:30 - 10:30 AM, 1 - 1:30 PM, and 2 - 2: 30 PM Mountain time. (I forgot about that 2 PM call when I left my message...)

Thanks,
Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Huntington Alloys renewal application - submittal process

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "Felyt, Roger" <Roger.Felyt@arcadis.com>

Fri, May 5, 2023 at 11:31 AM

Hi Roger,

I'll try to give you a call around 11:00 am MT. Just respond if anything changes because I am pretty flexible today.

Dan

On Fri, May 5, 2023 at 11:17 AM Felyt, Roger <Roger.Felyt@arcadis.com> wrote:

Hi Dan,

I just left a vm for you.

If you have time today, I'd like to chat about the application submittal process to make sure we get things right on our end.

I should be available today except these time: 9:30 - 10:30 AM, 1 - 1:30 PM, and 2 - 2: 30 PM Mountain time. (I forgot about that 2 PM call when I left my message...)

Thanks,
Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Huntington Alloys renewal application - submittal process

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: Dan Roberts <daniel.p.roberts@wv.gov>

Fri, May 5, 2023 at 11:17 AM

Hi Dan,

I just left a vm for you.

If you have time today, I'd like to chat about the application submittal process to make sure we get things right on our end.

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6 attachments

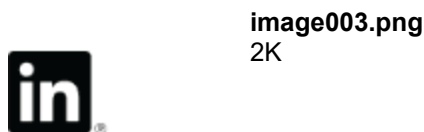




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image007.png
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Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Huntington Alloys Title V renewal application due date

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Tue, May 2, 2023 at 11:45 AM

Hi Dan,

Good morning. Thanks for confirming the due date and method.

And thanks for clarifying the CAM question.

Have a good week,

Roger

From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Tuesday, May 2, 2023 7:40 AM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Huntington Alloys Title V renewal application due date

Hi Roger,

Good morning. I checked on your submittal date question and my supervisor confirmed that the application needs to be electronically submitted by email (or postmarked if mailed) by the due date of Saturday, May 27th.

Also, CAM applies to any regulation, federal or state.

Let me know if any additional questions pop up.

Dan

On Mon, May 1, 2023 at 9:06 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

The Huntington Alloys permit renewal application is due by Saturday, May 27.

Since this falls on a weekend, what is your agency's policy on the due date?

Thanks,

Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Huntington Alloys Title V renewal application due date

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "Felty, Roger" <Roger.Felty@arcadis.com>

Tue, May 2, 2023 at 9:40 AM

Hi Roger,

Good morning. I checked on your submittal date question and my supervisor confirmed that the application needs to be electronically submitted by email (or postmarked if mailed) by the due date of Saturday, May 27th.

Also, CAM applies to any regulation, federal or state.

Let me know if any additional questions pop up.

Dan

On Mon, May 1, 2023 at 9:06 AM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

The Huntington Alloys permit renewal application is due by Saturday, May 27.

Since this falls on a weekend, what is your agency's policy on the due date?

Thanks,

Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Huntington Alloys Title V renewal application due date

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov>

Mon, May 1, 2023 at 5:19 PM

To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Dan,

Yes, as long as they submit by Saturday, May 27th, it would be fine. We used to say it had to be postmarked by the due date, but with electronic submittal, it just has to be received by email by the due date. We will not be extending the deadline until Monday.

You are correct. CAM applies to any regulation, federal or state. It is not limited to only federal regulations.

Thanks,
Carrie

On Mon, May 1, 2023 at 5:08 PM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

Carrie,

Hey. Roger Felty posed the question below about the due date for the Huntington Alloys renewal being on Saturday May 27. I don't believe there would be an extension to the following Monday since it falls on the weekend, but that it is alright to submit it on Saturday May 27 meet the deadline even though it is not an official business day. Is this correct?

Also, he had a follow-up question regarding the CAM rules... "Since CAM is a federal rule, am I correct in assuming that the emission limitation or standard a source is subject to would also have to be a federal standard? And if a source is only subject to a state emission limitation/standard, then CAM would not apply?"

I had replied on Friday and told him that I believed it would apply to any PSEU with a state or federal emission limitation or standard, but told him I would double check and get back with him. So just to confirm, does the first consideration in the CAM determination apply to a PSEU with only a state emission limitation or standard?

Thanks,
Dan

----- Forwarded message -----

From: **Felty, Roger** <Roger.Felty@arcadis.com>

Date: Mon, May 1, 2023 at 9:06 AM

Subject: Huntington Alloys Title V renewal application due date

To: Roberts, Daniel P <daniel.p.roberts@wv.gov>

Hi Dan,

The Huntington Alloys permit renewal application is due by Saturday, May 27.

Since this falls on a weekend, what is your agency's policy on the due date?

Thanks,

Roger

Roger Felty

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Fwd: Huntington Alloys Title V renewal application due date

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>

Mon, May 1, 2023 at 5:08 PM

Carrie,

Hey. Roger Felty posed the question below about the due date for the Huntington Alloys renewal being on Saturday May 27. I don't believe there would be an extension to the following Monday since it falls on the weekend, but that it is alright to submit it on Saturday May 27 meet the deadline even though it is not an official business day. Is this correct?

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Thanks,
Dan

----- Forwarded message -----

From: **Felty, Roger** <Roger.Felty@arcadis.com>
Date: Mon, May 1, 2023 at 9:06 AM
Subject: Huntington Alloys Title V renewal application due date
To: Roberts, Daniel P <daniel.p.roberts@wv.gov>

Hi Dan,

The Huntington Alloys permit renewal application is due by Saturday, May 27.

Since this falls on a weekend, what is your agency's policy on the due date?

Thanks,

Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Huntington Alloys Title V renewal application due date

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Mon, May 1, 2023 at 9:06 AM

Hi Dan,

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Roger

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Title V application renewal work - Huntington Alloys - CAM question

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Fri, Apr 28, 2023 at 5:54 PM

Thanks, Dan.

You have a good weekend as well!

Roger

From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Friday, April 28, 2023 2:36 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Hey Roger,

From what I have read, I believe that the CAM requirements apply to PSEU's that are subject to either a state *OR* federal emission limitation or standard. I am not 100% sure, so I will consult with someone on Monday and get back to you. Both of the people I wish to contact are off on Fridays.

Have a great weekend!

Dan

On Thu, Apr 27, 2023 at 5:15 PM Felty, Roger <Roger.Felty@arcadis.com> wrote:

Hi Dan,

Thanks for sleuthing through the state files and for the detailed information.

Since CAM is a federal rule, am I correct in assuming that the emission limitation or standard a source is subject to would also have to be a federal standard?

And if a source is only subject to a state emission limitation/standard, then CAM would not apply?

Is this correct?

Thanks,

Roger

Roger Felty

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From: Roberts, Daniel P <daniel.p.roberts@wv.gov>
Sent: Thursday, April 27, 2023 1:31 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Hey. I have finally been able to review the CAM rule and various other supporting documents and the 2018 files in addition to all of the other renewals and the initial permit. I have also spoken at length with a co-worker.

To answer your question, there is no exemption from the CAM Rule based on a piece of equipment's date of installation/construction. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) that meets a three-part test. The PSEU must:

- a. be subject to an emission limitation or standard, and
- b. use a control device to achieve compliance, and
- c. have pre-control emissions that exceed or are equivalent to the major source threshold.

Note that the term "control device" means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The term "control device" does not include passive methods such as lids or seals or inherent process equipment provided for safety or material recovery.

Each of these three conditions must apply to the PSEU. So, the first step is to look at these three conditions and if one or more of them do not apply, then that should be what is listed as to why the CAM requirements do not apply to that PSEU and its control device.

<refer to Question 3 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

There are some kinds of equipment excluded from the CAM rule. The following PSEUs are excluded:

- a. those subject to 111 or 112 standards promulgated after 11/15/90, since those standards have been and will be designed with monitoring that provides a reasonable assurance of compliance;
- b. those subject to the acid rain program, emissions trading programs such as the acid rain program, emissions caps like those provided in the Intel P4 permit, or continuous compliance determination methods, i.e., where a regulatory requirement specifies a monitoring method for compliance, because CAM is believed to be redundant for these units [note that permitting authorities should ensure that these units have or get monitoring sufficient for trading emission credits in the proper currency]
- c. certain municipally-owned utility units, as defined in 40 CFR 72.2, that produce electricity during periods of peak electrical demand or emergency situations since these periods or situations are infrequent.

<refer to Question 4 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

Another good reference document is the Technical Guidance Document: Compliance Assurance Monitoring found at <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

A CAM plan was submitted with the first renewal application submitted in 2008. I have attached the associated Fact Sheet where the CAM Plan discussion can be found under Determinations and Justifications and in part reads as follows:

"#4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), the Wire Feeder (MS-1E), the Powder Torch (MS-2), and the Cap Line Shot Blaster (SM-2P) have pre-controlled potential emissions that exceed major source thresholds for particulate matter (PM). Each unit is subject to a PM standard and is equipped with a control device that is used to comply with federally-enforceable emission limits associated with their operation. Therefore each unit represents a pollutant specific emissions unit (PSEU) for PM. The submitted plans meet the requirements of the CAM rule.

Emissions from the #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), and the Wire Feeder (MS-1E) are controlled by baghouses MS-1-C1 and MS-1-C2. In accordance with 40 CFR § 64.4.(f), one CAM plan was submitted for these PSEUs. Emissions from the Powder Torch (MS-2) are controlled by baghouse MS-2-C."

Unfortunately, the original CAM Plan in its entirety as submitted in 2008 can only be found in paper form in the file room at the DEP headquarters in Kanawha City.

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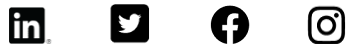
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Sent: Thursday, April 20, 2023 1:55 PM
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Subject: RE: Title V application renewal work - Huntington Alloys - CAM question

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Cc: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

RE: Title V application renewal work - Huntington Alloys - CAM question

1 message

Felty, Roger <Roger.Felty@arcadis.com>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Thu, Apr 27, 2023 at 5:15 PM

Hi Dan,

Thanks for sleuthing through the state files and for the detailed information.

Since CAM is a federal rule, am I correct in assuming that the emission limitation or standard a source is subject to would also have to be a federal standard?

And if a source is only subject to a state emission limitation/standard, then CAM would not apply?

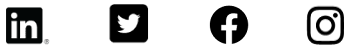
Is this correct?

Thanks,

Roger

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Sent: Thursday, April 27, 2023 1:31 PM
To: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Re: Title V application renewal work - Huntington Alloys - CAM question

Roger,

Hey. I have finally been able to review the CAM rule and various other supporting documents and the 2018 files in addition to all of the other renewals and the initial permit. I have also spoken at length with a co-worker.

To answer your question, there is no exemption from the CAM Rule based on a piece of equipment's date of installation/construction. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) that meets a three-part test. The PSEU must:

- a. be subject to an emission limitation or standard, and
- b. use a control device to achieve compliance, and
- c. have pre-control emissions that exceed or are equivalent to the major source threshold.

Note that the term "control device" means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The term "control device" does not include passive methods such as lids or seals or inherent process equipment provided for safety or material recovery.

Each of these three conditions must apply to the PSEU. So, the first step is to look at these three conditions and if one or more of them do not apply, then that should be what is listed as to why the CAM requirements do not apply to that PSEU and its control device.

<refer to Question 3 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

There are some kinds of equipment excluded from the CAM rule. The following PSEUs are excluded:

- a. those subject to 111 or 112 standards promulgated after 11/15/90, since those standards have been and will be designed with monitoring that provides a reasonable assurance of compliance;
- b. those subject to the acid rain program, emissions trading programs such as the acid rain program, emissions caps like those provided in the Intel P4 permit, or continuous compliance determination methods, i.e., where a regulatory requirement specifies a monitoring method for compliance, because CAM is believed to be redundant for these units [note that permitting authorities should ensure that these units have or get monitoring sufficient for trading emission credits in the proper currency]
- c. certain municipally-owned utility units, as defined in 40 CFR 72.2, that produce electricity during periods of peak electrical demand or emergency situations since these periods or situations are infrequent.

<refer to Question 4 in the Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule found at <https://www.epa.gov/sites/default/files/2016-05/documents/camfaq.pdf>>

Another good reference document is the Technical Guidance Document: Compliance Assurance Monitoring found at <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

A CAM plan was submitted with the first renewal application submitted in 2008. I have attached the associated Fact Sheet where the CAM Plan discussion can be found under Determinations and Justifications and in part reads as follows:

"#4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), the Wire Feeder (MS-1E), the Powder Torch (MS-2), and the Cap Line Shot Blaster (SM-2P) have pre-controlled potential emissions that exceed major source thresholds for particulate matter (PM). Each unit is subject to a PM standard and is equipped with a control device that is used to comply with federally-enforceable emission limits associated with their operation. Therefore each unit represents a pollutant specific emissions unit (PSEU) for PM. The submitted plans meet the requirements of the CAM rule.

Emissions from the #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), and the Wire Feeder (MS-1E) are controlled by baghouses MS-1-C1 and MS-1-C2. In accordance with 40 CFR § 64.4.(f), one CAM plan was submitted for these PSEUs. Emissions from the Powder Torch (MS-2) are controlled by baghouse MS-2-C."

Unfortunately, the original CAM Plan in its entirety as submitted in 2008 can only be found in paper form in the file room at the DEP headquarters in Kanawha City.

In reviewing the 2018 renewal application, of all of the Air Pollution Control Device Forms included in Attachment G, there were 11 which checked the "No" box in regards to being subject to the CAM requirements of 40 C.F.R. 64, but no justification was provided. These can be found on pages 353 (PM-20-C, baghouse), 357 (SM-4-C, fan), 364 (BW-11-C, baghouse), 368 (CD-40-C, baghouse/single cyclone), 370 (TP-7A-1C, single cyclone), 372 (TP-7A-3C, baghouse), 373 (TP-8A-1C, single cyclone), 375 (TP-8A-3C, baghouse), 376 (TP-9-C, dry plate ESP), 377 (TP-10-C, baghouse) and 378 (TP-19-C, baghouse).

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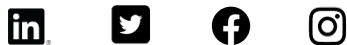
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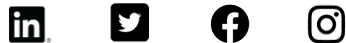
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I'm working with Melissa on the Huntington Alloys air permit renewal application.

As you've requested in emails with Melissa, we are working to provide CAM applicability justifications on the Attachment G control device forms.

We're working from the 2018 renewal forms as our 'go-by' and I have a question on a recurring type of statement that appears on several of the 2018 forms.

Several 2018 control device forms say CAM doesn't apply because the emission unit served by the control device was installed before 1966, 1970, or 1974. Or the form says the unit was installed in 1962.

What is the significance of these dates in regards to being exempt from CAM?

We want to be sure to provide proper CAM justification in the renewal application.

We'd appreciate any insight you can provide on this issue.

Thanks,

Roger

Roger Felty

Principal Air Quality Consultant

Arcadis U.S., Inc.

T +1 720 409 0288

roger.felty@arcadis.comwww.arcadis.com



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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Automatic reply: Title V application renewal work - Huntington Alloys - Follow-up1 message

Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>

Tue, Mar 14, 2023 at 11:03 AM

To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Thank you for your email!

I am out of the office after 3:15 pm eastern on Friday, 3/10. **I will be out of the office on PTO the week of 3/13.** I will have limited access to email and phone during this time. However, if your need is urgent, please contact me on my mobile phone number listed below and I will get back you.

Best regards,

Melissa Hatfield-Atkinson

304-919-1943

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Title V application renewal work - Huntington Alloys - Follow-up

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>

Tue, Mar 14, 2023 at 11:02 AM

To: "Hatfield-Atkinson, Melissa" <Melissa.HatfieldAtkinson@arcadis.com>

Good morning Melissa!

Hey. I was thinking about this facility and might have an idea why the forms and info were missing from the previous renewal applications. I could not find an electronic copy of the 2003 initial application on our common drive or application extender. The 2008 renewal application indicated in Item 10 that it included CBI. The 2013 renewal application indicated that it did not include CBI. The 2018 renewal application indicated that it did not include CBI and there was a line in the cover letter that read "Due to time constraints we have decided to make everything non confidential." Therefore, some of the missing documents/forms/information may have been previously listed as CBI, but then not included in the application once it was decided to not claim any CBI. This is just a theory. The CBI from the previous applications would have to be reviewed at the DAQ headquarters.

Dan

On Thu, Feb 23, 2023 at 11:00 AM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

Sounds like a plan. I apologize for not being able to jump into this sooner. We are kind of in a pickle in that the missing information seems relevant and important, but it also wasn't included in the 2018 renewal application and the permit was approved. My concern is that the trend seems to be that EPA is looking a little deeper into the draft permits they are reviewing. But, it is what it is. We can only work with what is available to us.

Dan

On Thu, Feb 23, 2023 at 10:39 AM Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com> wrote:

Thanks, Dan! Appreciate the follow-up while you're in the middle of other things! We'll take another look at the information based on your response and see where we land.

All my best,

Melissa

From: Roberts, Daniel P <daniel.p.roberts@wv.gov>**Sent:** Thursday, February 23, 2023 10:36 AM**To:** Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>**Subject:** Re: Title V application renewal work - Huntington Alloys - Follow-up

Hey Melissa!

I received your email, but just haven't been able to dive into it yet. This past Monday was a state holiday and I have been pressed working on another deadline for the end of this week. But I did exchange a couple emails with Carrie and got some feedback from her. We figured that the lack of available info stems from the age of the equipment, having older permits and no recent modifications. Anyhow, here was her response:

"Since this equipment is old, that's probably why some of the information was not provided. Also, these forms are general and try to cover any type of equipment at the facility, so some fields may not be applicable to certain equipment. I think if you have everything you need to determine applicability so that you can include all applicable requirements, that would be enough. If you don't need the info to determine if there are applicable requirements or what those requirements are, then I wouldn't make them try to find the info just to fill out the form. We should have the CAM applicability justifications though. I did see where some of these were missing in the previous forms."

Hopefully that will help for now and will keep things moving. Without looking at the current permit and previous application yet, it seems like most of the items listed under Attachment E would be important (Process Description, design capacities and emissions info) as well as the CAM info. We will just have to see what you can find and go from there, I should be able to get into this by the beginning of next week and will get back to you.

Sincerely,

Dan Roberts

WV Department of Environmental Protection

Division of Air Quality

(304) 926-0499 ext.41902

cell (304) 767-1222

daniel.p.roberts@wv.gov

On Thu, Feb 23, 2023 at 9:03 AM Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com> wrote:

Hi, Dan! Wanted to do a quick check-in with you about this since I've not seen anything back yet. If we need to do a call, let me know and I'll be happy to set something up!

Many thanks!

Melissa

From: Hatfield-Atkinson, Melissa
Sent: Friday, February 17, 2023 9:50 AM
To: DANIEL.P.ROBERTS@WV.GOV
Cc: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Title V application renewal work - Huntington Alloys

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Max operating schedule, e.g., 24/7/52

HAP PTE (specifically for SM-3-P, SM-4-P)

Calculation method for emissions, e.g., AP-42

Attachment G, Control Devices forms missing 2018 information:

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Control efficiency

Characteristic design parameters, e.g., air flow, pressure drop, max temp, air to cloth ratio, etc.

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Many thanks for your help! Looking forward to collaborating with you!

All my best,

Melissa

Melissa Hatfield-Atkinson, PE
Principal Air Quality Engineer

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Title V application renewal work - Huntington Alloys - Follow-up

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>

Thu, Feb 23, 2023 at 11:00 AM

To: "Hatfield-Atkinson, Melissa" <Melissa.HatfieldAtkinson@arcadis.com>

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Sent: Thursday, February 23, 2023 10:36 AM
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Subject: Re: Title V application renewal work - Huntington Alloys - Follow-up

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Sincerely,

Dan Roberts

WV Department of Environmental Protection

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daniel.p.roberts@wv.gov

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Many thanks!

Melissa

From: Hatfield-Atkinson, Melissa
Sent: Friday, February 17, 2023 9:50 AM
To: DANIEL.P.ROBERTS@WV.GOV
Cc: Felty, Roger <Roger.Felty@arcadis.com>
Subject: Title V application renewal work - Huntington Alloys

Good morning, Dan, and Happy Friday! I hope this email finds you doing great!

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[Attachment E, Equipment forms missing 2018 information:](#)

Process description

Max hourly/annual process rates

Max operating schedule, e.g., 24/7/52

HAP PTE (specifically for SM-3-P, SM-4-P)

Calculation method for emissions, e.g., AP-42

Attachment G, Control Devices forms missing 2018 information:

Installation date

Control efficiency

Characteristic design parameters, e.g., air flow, pressure drop, max temp, air to cloth ratio, etc.

Justification for not subject to 40 CFR Part 64, Compliance Assurance Monitoring

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Many thanks for your help! Looking forward to collaborating with you!

All my best,

Melissa

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Title V application renewal work - Huntington Alloys

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov>
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Tue, Feb 21, 2023 at 8:10 AM

Dan,

Since this equipment is old, that's probably why some of the information was not provided. Also, these forms are general and try to cover any type of equipment at the facility, so some fields may not be applicable to certain equipment. I think if you have everything you need to determine applicability so that you can include all applicable requirements, that would be enough. If you don't need the info to determine if there are applicable requirements or what those requirements are, then I wouldn't make them try to find the info just to fill out the form. We should have the CAM applicability justifications though. I did see where some of these were missing in the previous forms.

Thanks,
Carrie

On Fri, Feb 17, 2023 at 11:50 AM Roberts, Daniel P <daniel.p.roberts@wv.gov> wrote:

Carrie,

Hey. This is what I received from Melissa this morning. Have you encountered anything like this before? Do you have any input? I am guessing that since the facility and Rule 13 permits are older, that's why the previous application didn't include all of the information. I will research it and get back to you with what I find.

Thanks,
Dan

----- Forwarded message -----

From: **Hatfield-Atkinson, Melissa** <Melissa.HatfieldAtkinson@arcadis.com>
Date: Fri, Feb 17, 2023 at 9:49 AM
Subject: Title V application renewal work - Huntington Alloys
To: DANIEL.P.ROBERTS@WV.GOV <DANIEL.P.ROBERTS@wv.gov>
Cc: Felty, Roger <Roger.Felty@arcadis.com>

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Attachment E, Equipment forms missing 2018 information:

Process description

Max hourly/annual process rates

Max operating schedule, e.g., 24/7/52

HAP PTE (specifically for SM-3-P, SM-4-P)

Calculation method for emissions, e.g., AP-42

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Installation date

Control efficiency

Characteristic design parameters, e.g., air flow, pressure drop, max temp, air to cloth ratio, etc.

Justification for not subject to 40 CFR Part 64, Compliance Assurance Monitoring

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All my best,

Melissa

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Fwd: Title V application renewal work - Huntington Alloys

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>

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From: **Hatfield-Atkinson, Melissa** <Melissa.HatfieldAtkinson@arcadis.com>
Date: Fri, Feb 17, 2023 at 9:49 AM
Subject: Title V application renewal work - Huntington Alloys
To: **DANIEL.P.ROBERTS@WV.GOV** <DANIEL.P.ROBERTS@wv.gov>
Cc: Felty, Roger <Roger.Felty@arcadis.com>

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Title V application renewal work - Huntington Alloys

1 message

Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
To: "DANIEL.P.ROBERTS@WV.GOV" <DANIEL.P.ROBERTS@wv.gov>
Cc: "Felty, Roger" <Roger.Felty@arcadis.com>

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Roberts, Daniel P <daniel.p.roberts@wv.gov>

Re: Contact re: TV permit renewal questions

1 message

Roberts, Daniel P <daniel.p.roberts@wv.gov>
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Thu, Feb 16, 2023 at 4:11 PM

Carrie,

Thanks for the heads up. I'll try to get familiar with their current permit and last renewal application when I have an opportunity.

Dan

On Thu, Feb 16, 2023 at 3:55 PM McCumbers, Carrie <carrie.mccumbers@wv.gov> wrote:

Dan,

I just wanted to give you a heads up that Melissa will probably be contacting you with questions about Huntington Alloys. This application is due on May 27th.

Thanks,
Carrie

----- Forwarded message -----

From: **Hatfield-Atkinson, Melissa** <Melissa.HatfieldAtkinson@arcadis.com>

Date: Thu, Feb 16, 2023 at 3:38 PM

Subject: RE: Contact re: TV permit renewal questions

To: McCumbers, Carrie <carrie.mccumbers@wv.gov>

Got it! Thanks for clarifying!

I believe what we will do is put a preliminary list of general questions together, email those to Dan and then try to get a call set up with him next week after he has time to review.

Appreciate you and your team's help! And your patience as we're working through all this! 😊

Have a great afternoon, friend!

Best,

Melissa

From: McCumbers, Carrie <carrie.mccumbers@wv.gov>
Sent: Thursday, February 16, 2023 3:35 PM
To: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Re: Contact re: TV permit renewal questions

Melissa,

It's not supposed to mean that. It means that it could be just a state rule or it could be just an NSR requirement or it could be both. For example, for a furnace that is subject to the Rule 7 opacity limit and that limit was included as condition 4.1.1 of their NSR permit R13-0001, you would cite 45CSR7-3.1 and R13-0001 Condition 4.1.1. For a grandfathered unit subject to the Rule 7 opacity, then all you cite is 45CSR7-3.1. For an emission limit from the NSR permit, you would only cite the NSR permit condition.

Thanks,

Carrie

On Thu, Feb 16, 2023 at 3:16 PM Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com> wrote:

Thanks, Carrie! Let me confer with the team and get back to you.

To confirm, since the application forms instructions say this:

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number.

Then that means we aren't REQUIRED to list the specific Rule 13 permit requirement as long as we list at least the state requirement. Am I reading that correctly? My initial thoughts are that could save some time....

From: McCumbers, Carrie <carrie.mccumbers@wv.gov>
Sent: Thursday, February 16, 2023 3:08 PM
To: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Re: Contact re: TV permit renewal questions

Melissa,

I'm not sure about an easier way to fill in the application than what you are doing. If you have questions, you can give me a call or email the questions. Either is fine with me. You can also contact Dan since he will be reviewing the application. Whatever works best for you, we'll be happy to answer your questions.

Thanks,

Carrie

On Thu, Feb 16, 2023 at 1:22 PM Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com> wrote:

Thanks for looking into this, Carrie! An error in the previous TV application could very well be possible. If that's the case, then we can just take out the Rule 13 permit reference and cite the general WV CSR requirement(s).

The TV permit groups multiple sources together and lists multiple permits together, so we're trying to go back through and match everything up to the appropriate Rule 13 for purposes of the application forms.

Example:

Huntington Alloys Corporation

5.0. Direct Fired Furnaces Requirements [PM-10A-P, PM-10B-P, PM-11-P, PM-12A-P, PM-12B-P, PM-13-P, PM-14-P, PM-15-P, PM-16-P, PM-17A-P, PM-17B-P, PM-18-P, PM-19-P, PM-23-P, PM-28-P, PM-29-P, SM-6-P, SM-7-P, BW-1A-P, BW-1B-P, BW-2-P, VM-2-P, VM-5-P, MA-4-P, MA-5-P]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7. [45CSR§§7-3.1 and 3.2 and 45CSR13 - R13-1646 Condition 4.1.4., R13-1767 Condition B.1., and R13-2163 Condition 4.1.6.]

Is there a better way to do this? I'm not thinking of another way unless we list only the "underlying rule/regulation citation" and not the specific Rule 13 permit requirement.

Thanks for the clarification about the permit numbers. We obviously missed the explanation, and it certainly makes sense!

What would be the most convenient way to get some additional general questions we have addressed? Should we set up a call with you or Dan just send our questions via email?

Thanks!

Melissa

From: McCumbers, Carrie <carrie.mccumbers@wv.gov>
Sent: Thursday, February 16, 2023 1:08 PM
To: Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com>
Subject: Re: Contact re: TV permit renewal questions

Hi Melissa,

Bobbie worked on their initial Title V permit and their two renewals, but she retired around 2019. I plan to assign the 2023 renewal to Dan Roberts, but he's never worked on their permits.

I looked at the current Title V permit and I don't see any requirements for PM-10A-P and PM-10B-P from R13-2163A. I looked back at R13-2163 and it was for the construction of PM-28-P and PM-29-P. R13-2163A was for

the addition of an abrasive saw CD-40-P. Also, R13-2163 was issued on January 14, 1998, and PM-10A-P and PM-10B-P have installation dates of 1989. Since there are no R13-2163A requirements for PM-10A-P and PM-10B-P in the Title V permit and these emission units do not show up in R13-2163A, it leads me to think that maybe there was an error in the previous Title V application. Could this be the case?

Also, there is not a typo in our Title V permit. We just cite the original permit number and then list the current version of the permit in Table 1.2. We started doing this several years ago because it made modifications much easier, otherwise, we had to change all the citations even if just one condition changed in the whole permit. Here is where we state that in the Title V permit.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0137	March 24, 1975
R13-1165	November 3, 1989
R13-1646A	March 5, 2015
R13-1767	October 17, 1994
R13-2163A	December 20, 2010

If you have any more questions, just let me know. I'll try to help.

Thanks,
Carrie

On Thu, Feb 16, 2023 at 12:26 PM Hatfield-Atkinson, Melissa <Melissa.HatfieldAtkinson@arcadis.com> wrote:

Hi, Carrie!

Hope this email finds you well! We are working on a Title V renewal for the Huntington Alloys facility (ID R30-01100007-2018). As we're comparing the previous Title V application to the current TV permit we are running into the situation where the previous application is referencing R13 permit numbers for sources that aren't actually listed in the R13.

Example: Previous TV application says requirements for PM-10A-P, PM-10B-P are found in R13-2163. But 2163A issued in 2010 (we assume the 2163 was a typo in TV permit) does not have these sources listed in the equipment list as what the permit covers. (We're not seeing finding these sources in the other R13s, BTW.)

1.0. Emission Units

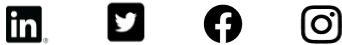
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device
PM-28-P	PM-28-S	Salem Forge Furnace	1998	13,000 lb/hr	----
PM-29-P	PM-29-S	Salem Forge Furnace	1998	13,000 lb/hr	----
CD-40-P Saw	CD-40-E Saw	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5,708 lbs/hr	CD-40-C Baghouse / Cyclone

Who can we connect with in your group to discuss how to resolve these issues (along with some other random questions we have)? Bobbie was the last permit writer and I don't think she's there anymore.

Many thanks!

Melissa

Melissa Hatfield-Atkinson, PE
 Principal Air Quality Engineer
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 T +1 724 934 9547
 M +1 304 919 1943
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Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

- Type of NSR Application (check all that apply):

- Construction
- Modification
- Class I Administrative Update
- Class II Administrative Update
- Relocation
- Temporary
- Permit Determination

- Type of 45CSR30 (TITLE V) Application:

- Title V Initial
- Title V Renewal
- Administrative Amendment**
- Minor Modification**
- Significant Modification**
- Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENTS to the combined NSR/Title V application.**

- Payment Type:

- Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):

- Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

- Company Contact

- Name:
- Email:
- Phone Number:

- Consultant

- Name:
- Email:
- Phone Number:



3200 Riverside Dr.

Huntington, WV 25705-1771 U.S.A.
(304) 526-5228 Fax:(304) 526-5437
www.specialmetals.com

Tom Bell
Environmental Manager

May 25, 2023

Laura Crowder
Director
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Dear Ms. Crowder,

Please find enclosed the Huntington Alloys Corporation Title V renewal application. The renewal has been completed per the renewal application requirements under section 4.3 of 45CSR30.

If you should have any questions or require further information please do not hesitate to contact me at (304) 526-5259.

Sincerely,

A handwritten signature in blue ink that reads "Tom Bell". The signature is written in a cursive style with a large, looped "B" and a long horizontal stroke for the "T".

Tom Bell
Environmental Manger

Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

• DAQ Facility ID (for existing facilities only):

• Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

• Type of NSR Application (check all that apply):

- Construction
- Modification
- Class I Administrative Update
- Class II Administrative Update
- Relocation
- Temporary
- Permit Determination

• Type of 45CSR30 (TITLE V) Application:

- Title V Initial
- Title V Renewal
- Administrative Amendment**
- Minor Modification**
- Significant Modification**
- Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

• Payment Type:

- Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

• If the permit writer has any questions, please contact (all that apply):

Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

Company Contact

- Name:
- Email:
- Phone Number:

Consultant

- Name:
- Email:
- Phone Number:



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form containing 10 sections: 1. Name of Applicant, 2. Facility Name or Location, 3. DAQ Plant ID No., 4. Federal Employer ID No. (FEIN), 5. Permit Application Type, 6. Type of Business Entity, 7. Is the Applicant the: Owner, Operator, Both, 8. Number of onsite employees, 9. Governmental Code, 10. Business Confidentiality Claims.

11. Mailing Address		
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: (304) 526-5100	Fax Number:	

12. Facility Location (Physical Address)		
Street: 3200 Riverside Drive	City: Huntington	County: Cabell
UTM Easting: 379.20 km	UTM Northing: 4,252.30 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions:		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Ohio Kentucky	
Is facility located within 100 km of a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Jay Khetani		Title: General Manager
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: 304-526-5100	Cell Number:	
E-mail address: jkhetani@precastcorp.com		
Environmental Contact: Tom Bell		Title: Environmental Manager
Street or P.O. Box: 3200 Riverside Drive		
City: Huntington	State: WV	Zip: 25705
Telephone Number: 304-526-5228	Cell Number:	
E-mail address: tom.bell@specialmetals.com		
Application Preparer: Roger Felty		Title: Principal Air Quality Consultant
Company: Arcadis U.S., Inc.		
Street or P.O. Box: 630 Plaza Drive, Suite 200		
City: Highlands Ranch	State: CO	Zip: 80129
Telephone Number: 720-409-0288	Cell Number:	
E-mail address: roger.felty@arcadis.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Huntington Alloys Corp. is a nickel manufacturing facility. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty (120) different alloys.	Huntington Alloys Corp. melting facilities and rolling mills are devoted exclusively to the production of wrought nickel and high nickel alloy products.	33149	3356

Provide a general description of operations.

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> Cross-State Air Pollution Rule (45CSR43)	

19. Non Applicability Determinations
<p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>40CFR Part 60 subpart Dc - New Source Performance Standards (NSPS) for Small Industrial Steam Generating Units. The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 MMBtu/hr.</p> <p>40CFR Part 60 subpart K - New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).</p>
<p><input checked="" type="checkbox"/> Permit Shield</p>

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

40 CFR 60 Subpart Ka - New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).

40 CFR 60 Subpart Kb - New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Some of the tanks storing volatile organic liquids have a capacity greater than 75 m³ and less than 151m³, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR§ 60.110b(b).

40 CFR Part 60 Subparts AA and AAa - New Source Performance Standards (NSPS) for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983. The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and AOR vessel were installed in 1966, 1971, and 1971 respectively, before the applicability date of this regulation (October 21, 1974). Therefore, this regulation is not applicable to the facility.

40 CFR Part 63 - Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling- HCl Process Facilities and Hydrochloric Acid Regeneration Plants. This standard is not applicable to facilities that pickle specialty steel. Specialty Steel means a category of steel that includes silicon electrical, alloy and stainless steels.

40 CFR Part 63 – Subpart YYYYYY – National Emission Standard for Hazardous Air Pollutants for Area/Sources: Electric Arc Furnace Steelmaking Facilities. This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Open burning [45CSR§6-3.1.]

Open burning exemptions [45CSR§6-3.2.]

Asbestos [40 CFR 61 and 45CSR34]

Odor [45CSR§4-3.1 State-Enforceable only.]

Standby plan for reducing emissions [45CSR§11-5.2]

Emission inventory [W.Va. Code § 22-5-4(a)(14)]

Ozone-depleting substances [40 C.F.R. 82, Subpart F]

Risk Management Plan [40 C.F.R. 68]

Fugitive Particulate [45CSR§7-5.1. and 45CSR13 - R13-2163, Condition 4.1.6.]



Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Odors. For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. [45CSR§30-5.1.c. State-Enforceable only.]

Fugitives. The permittee shall monitor all fugitive PM emission sources as required by Subsection 3.1.9. to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive PM capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.[45CSR§30-5.1.c.]

Fugitives. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by Subsection 3.1.10. applied at the facility. These records shall be maintained on site.[45CSR§30-5.1.c.]

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

21. Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit (<i>if any</i>)
R13-0137	03/24/1975	
R13-1165	11/03/1989	
R13-1646A	03/05/2015	
R13-1767	10/17/1994	
R13-2163A	12/20/2010	
R13-2532I	02/25/2016	

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	267.9
Nitrogen Oxides (NO _x)	314.6
Lead (Pb)	
Particulate Matter (PM _{2.5}) ¹	
Particulate Matter (PM ₁₀) ¹	130.9
Total Particulate Matter (TSP)	130.9
Sulfur Dioxide (SO ₂)	8.92
Volatile Organic Compounds (VOC)	51.0
Hazardous Air Pollutants ²	Potential Emissions
Nickel	27.2
Chromium	7.6
Hydrochloric Acid	3.9
Hexane	5.8
Regulated Pollutants other than Criteria and HAP	Potential Emissions

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input checked="" type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input checked="" type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

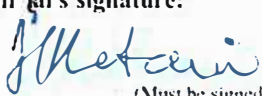
24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input checked="" type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input checked="" type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input checked="" type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input checked="" type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance	
<i>Note: This Certification must be signed by a responsible official as defined in 45CSR§30-2.38.</i>	
a. Certification of Truth, Accuracy and Completeness	
I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.	
b. Compliance Certification	
Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.	
Responsible official (type or print)	
Name: Jay Khetani	Title: General Manager
Responsible official's signature:	
Signature: 	Signature Date: 5/25/23 (Must be signed and dated in blue ink or have a valid electronic signature)

Note: Please check all applicable attachments included with this permit application:	
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

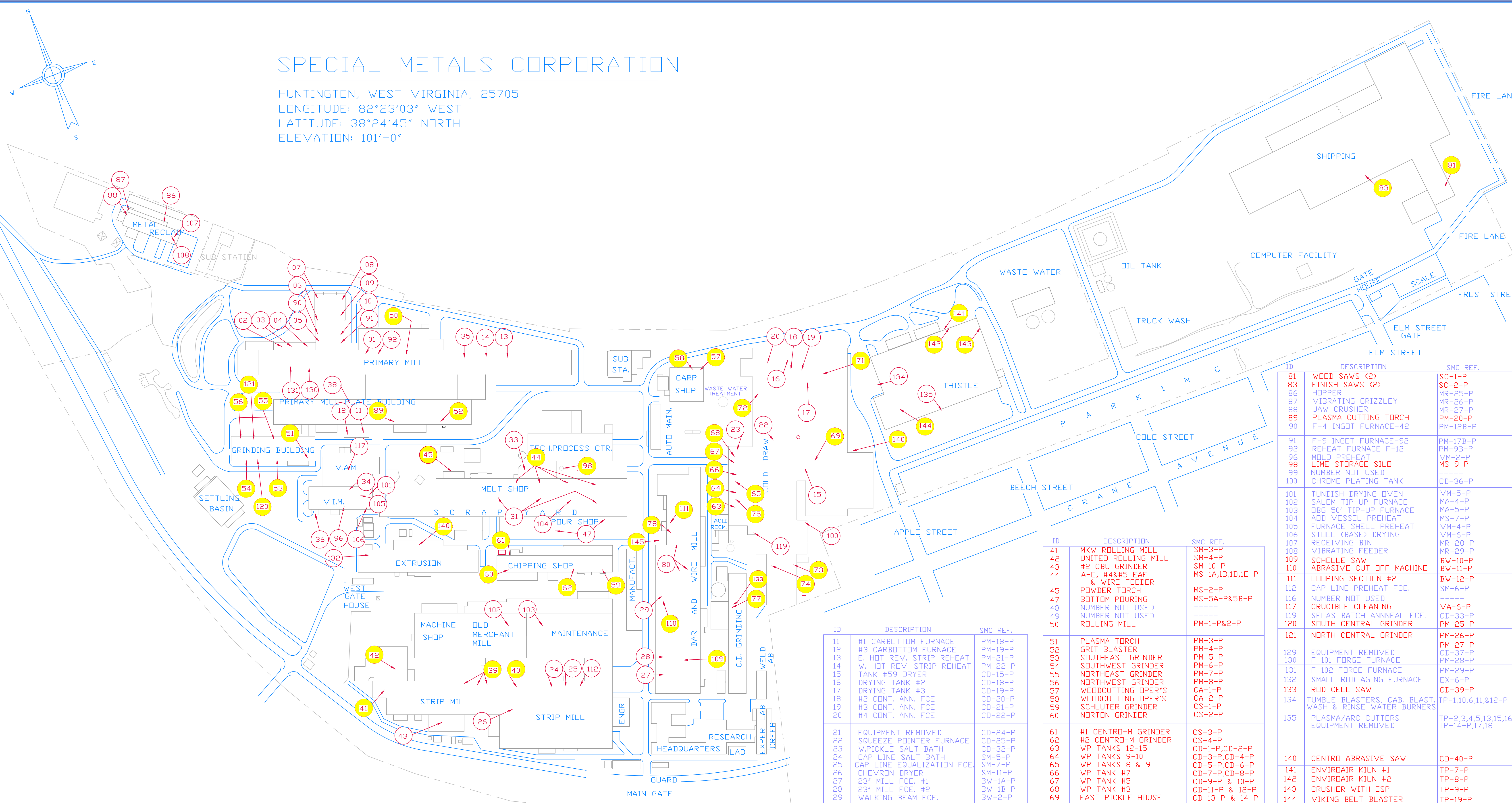
Attachment A
Area Map

Attachment B

Plot Plan

SPECIAL METALS CORPORATION

HUNTINGTON, WEST VIRGINIA, 25705
 LONGITUDE: 82°23'03" WEST
 LATITUDE: 38°24'45" NORTH
 ELEVATION: 101'-0"



PLANT EMISSION SOURCES - HUNTINGTON PLANT

SCALE 1/16" = 10 FT.

HIGHLIGHTED SOURCES ARE TITLE V
 VISUAL EMISSION CHECKS

ID	DESCRIPTION	SMC REF.
01	REHEAT FURNACE F-11	PM-9A-P
02	F-2 FORGE FCE #1	PM-10A-P
03	F-2 FORGE FCE #2	PM-10B-P
04	F-3 FORGE FURNACE	PM-11-P
05	F-4 INGOT FURNACE-41	PM-12A-P
06	F-5 INGOT FURNACE	PM-13-P
07	F-6 INGOT FURNACE	PM-14-P
08	F-7 INGOT FURNACE	PM-15-P
09	F-8 INGOT FURNACE	PM-16-P
10	F-9 INGOT FURNACE-91	PM-17A-P

ID	DESCRIPTION	SMC REF.
11	#1 CARBOTTOM FURNACE	PM-18-P
12	#3 CARBOTTOM FURNACE	PM-19-P
13	E. HOT REV. STRIP REHEAT	PM-21-P
14	W. HOT REV. STRIP REHEAT	PM-22-P
15	TANK #59 DRYER	CD-15-P
16	DRYING TANK #2	CD-18-P
17	DRYING TANK #3	CD-19-P
18	#2 CDNT. ANN. FCE.	CD-20-P
19	#3 CDNT. ANN. FCE.	CD-21-P
20	#4 CDNT. ANN. FCE.	CD-22-P
21	EQUIPMENT REMOVED	CD-24-P
22	SQUEEZE POINTER FURNACE	CD-25-P
23	W/PICKLE SALT BATH	CD-32-P
24	CAP LINE SALT BATH	SM-5-P
25	CAP LINE EQUALIZATION FCE.	SM-7-P
26	CHEVRON DRYER	SM-11-P
27	23' MILL FCE. #1	BW-1A-P
28	23' MILL FCE. #2	BW-1B-P
29	WALKING BEAM FCE.	BW-2-P
31	MS PREHEAT BURNER	MS-4A,4B,4C,4D,4E,4F-P
33	MAIN BOILER	B-1-P
34	VIM BOILER	B-4-P
35	TIP-UP FURNACE	PM-24-P
36	STRESS RELIEF FCE.	VM-1-P
37	ND. NOT USED	----
38	PLATE ANNEAL FCE.	PM-23-P
39	CAP LINE PICKLING	SM-1-P
40	CAP LINE SHOT BLAST	SM-2-P

ID	DESCRIPTION	SMC REF.
41	MKW ROLLING MILL	SM-3-P
42	UNITED ROLLING MILL	SM-4-P
43	#2 CBU GRINDER	SM-10-P
44	A-O, #4 EAF & WIRE FEEDER	SM-1A,1B,1D,1E-P
45	POWDER TORCH	MS-2-P
47	BOTTOM POURING	MS-5A-P&5B-P
48	NUMBER NOT USED	----
49	NUMBER NOT USED	----
50	ROLLING MILL	PM-1-P&2-P
51	PLASMA TORCH	PM-3-P
52	GRIT BLASTER	PM-4-P
53	SOUTHWEST GRINDER	PM-5-P
54	SOUTHWEST GRINDER	PM-5-P
55	NORTHEAST GRINDER	PM-7-P
56	NORTHWEST GRINDER	PM-8-P
57	WOODCUTTING OPER'S	CA-1-P
58	WOODCUTTING OPER'S	CA-2-P
59	SCHLUTER GRINDER	CS-1-P
60	NORTON GRINDER	CS-2-P
61	#1 CENTRO-M GRINDER	CS-3-P
62	#2 CENTRO-M GRINDER	CS-4-P
63	WP TANKS 12-15	CD-1-P,CD-2-P
64	WP TANKS 9-10	CD-3-P,CD-4-P
65	WP TANKS 8 & 9	CD-5-P,CD-6-P
66	WP TANK #7	CD-7-P,CD-8-P
67	WP TANK #5	CD-9-P & 10-P
68	WP TANK #3	CD-11-P & 12-P
69	EAST PICKLE HOUSE	CD-13-P & 14-P
70	EQUIPMENT REMOVED	CD-16-P
71	EAST CUTTERS (3 SAWS)	CD-17-P
72	WEST CUTTERS (3 SAWS)	CD-23-P
73	MCKAY TUBE RED. SAW	CD-26-P
74	WEAN TUBE RED. SAW	CD-28-P
75	WP TANK #11	CD-38-P
76	NUMBER NOT USED	----
77	GRIND BUILDING SAW	CD-31-P
78	LOOPING SECT. 1	BW-3-P
80	22,23,&CC	BW-7-P,8-P&9-P

ID	DESCRIPTION	SMC REF.
81	WOOD SAWS (2)	SC-1-P
83	FINISH SAWS (2)	SC-2-P
86	HOPPER	MR-25-P
87	VIBRATING GRIZZLEY	MR-26-P
88	JAW CRUSHER	MR-27-P
89	PLASMA CUTTING TORCH	PM-20-P
90	F-4 INGOT FURNACE-42	PM-12B-P
91	F-9 INGOT FURNACE-92	PM-17B-P
92	REHEAT FURNACE F-12	PM-9B-P
96	MOLD PREHEAT	VM-2-P
98	LIME STORAGE SILD	MS-9-P
99	NUMBER NOT USED	----
100	CHROME PLATING TANK	CD-36-P
101	TUNDISH DRYING OVEN	VM-5-P
102	SALEM TIP-UP FURNACE	MA-4-P
103	DBG 50' TIP-UP FURNACE	MA-5-P
104	ADD VESSEL PREHEAT	MS-7-P
105	FURNACE SHELL PREHEAT	VM-4-P
106	STOOD (BASE) DRYING	VM-6-P
107	RECEIVING BIN	MR-28-P
108	VIBRATING FEEDER	MR-29-P
109	SCHOLLE SAW	BW-10-P
110	ABRASIVE CUT-OFF MACHINE	BW-11-P
111	LOOPING SECTION #2	BW-12-P
112	CAP LINE PREHEAT FCE.	SM-6-P
116	NUMBER NOT USED	----
117	CRUCIBLE CLEANING	VA-6-P
119	SELAS BATCH ANNEAL FCE.	CD-33-P
120	SOUTH CENTRAL GRINDER	PM-25-P
121	NORTH CENTRAL GRINDER	PM-26-P
122	EQUIPMENT REMOVED	PM-27-P
129	F-101 FORGE FURNACE	CD-37-P
130	F-101 FORGE FURNACE	PM-28-P
131	F-102 FORGE FURNACE	PM-29-P
132	SMALL ROD AGING FURNACE	EX-6-P
133	ROD CELL SAW	CD-39-P
134	TUMBLE BLASTERS, CAB. BLAST, WASH & RINSE WATER BURNERS	TP-1,10,6,11,&12-P
135	PLASMA/ARC CUTTERS	TP-2,3,4,5,13,15,16
	EQUIPMENT REMOVED	TP-14-P,17,18
140	CENTRO ABRASIVE SAW	CD-40-P
141	ENVIRODAIR KILN #1	TP-7-P
142	ENVIRODAIR KILN #2	TP-8-P
143	CRUSHER WITH ESP	TP-9-P
144	VIKING BELT BLASTER	TP-19-P
145	BOILER	B-1A-P

PART	DESCRIPTION	REQ'D	MATERIAL	CODE No.	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	MK	REVISION	NAME	DATE	CHK'D	Filed/Archive	REFERENCE DRAWINGS	A/C No.
					I	ADDED ID 140	DAH	9/10	BCB		D	ADDED SMALL ROD AGING FCE #132	CJB	9/07	CEP									
					H	ADDED THISTLE POINTS	JDC	7/10	BCB		C	HIGHLIGHT VISUAL EMISSIONS	JRH	11/03	DAH									
					L	REVISED THISTLE POINTS	JDM	6/15																
					K	ADDED PT 103	DAH	10/14	SAFETY		G	GENERAL REVISION	JRH	5/08	CEP									
					J	MOVED, ADDED ID POINTS 141 - 143	RAR	1/11			F	GENERAL REVISION	JRH	3-08	CEP									
					E	GENERAL REVISION	JRH	3-08	CEP		A	ADDED I.D. #130 & #131.	PCH	5/97										

DATE 9-05-96
 SCALE 1/16" = 10'
 DRAWN PCH
 CHK'D ANSELL
 APP'VD
 P.R. No.
 A/C No.

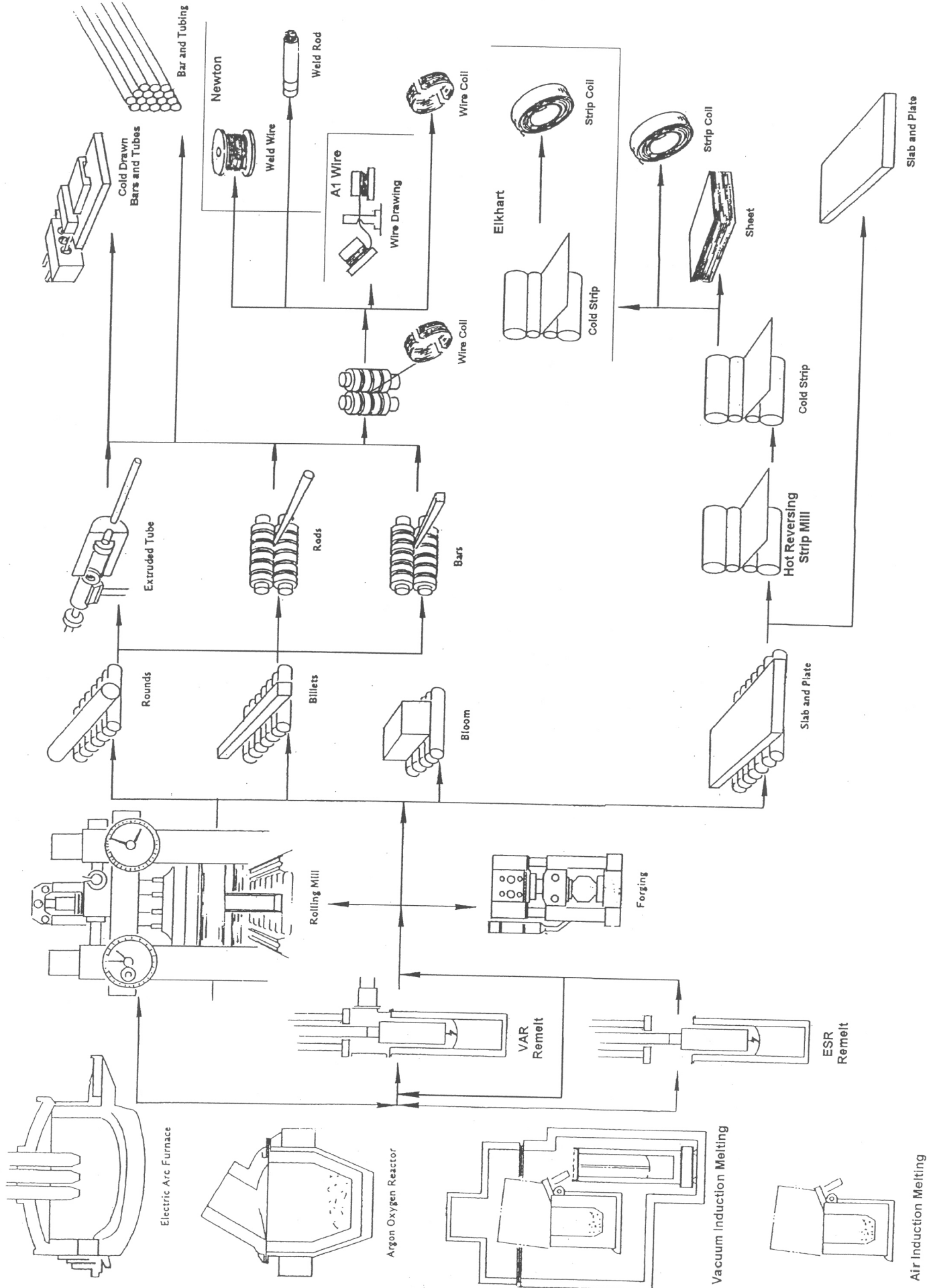
SPECIAL METALS CORPORATION
 3200 Riverside Drive
 Huntington, WV 25705-1771

EMISSION SOURCES- HUNTINGTON PLANT
 POINT I.D. NUMBERS
 ENVIRONMENTAL CONTROL

EQUIP. No. XXX
D-27819

Attachment C
Process Flow Diagram

HBE Production Process Routes



Attachment D
Title V Equipment Table

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Melt Shop					
B-1a-P	B-1a-S	Boiler	2019	33.5 mmBtu/hr	None
MS-1D	MS-1-S1 & MS-1-S2	#4 Electric Arc Furnace	1966	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1B	MS-1-S1 & MS-1-S2	#5 Electric Arc Furnace	1971	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1A	MS-1-S1 & MS-1-S2	Argon Oxygen Reactor	1971	35,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-1E-P	MS-1-S1 & MS-1-S2	Wire Feeder	2005	70,000 lbs/hr	Baghouses MS-1-C1 & MS-1-C2
MS-2	MS-2-S	Powder Torch	1962	35,000 lbs/hr	Baghouse MS-2-C
MS-9-P	MS-9-S	Lime Storage Silo	1975	30,000 lbs/hr	Baghouse MS-9-C
Primary Mill (PM)					
PM-1 & 2P	PM-1 & 2S	#1 Primary Rolling Mill	1964	100,000 lbs/hr	None
PM-3-P	PM-3S	Plasma Cutting Torch	1966	3,000 lbs/hr	None
PM-4-P	PM-4S	Grit Blaster (Plate Cleaning Machine)	<1970	3,900 lbs/hr	Baghouse PM-4-C
PM-5-P	PM-5S	Southeast Grinder	1980	8,000 lbs/hr	Baghouse PM-5-C
PM-25-P	PM-6 & 25-S	Southcentral Grinder	1966	8,000 lbs/hr combined with PM-6-P	Baghouse PM-6 & 25-C
PM-6-P	PM-6 & 25-S	Southwest Grinder	1974	see above	Baghouse PM-6 & 25-C
PM-7-P	PM-7-S	Northeast Grinder	1965	8,000 lbs/hr	Baghouse PM-7-C
PM-26-P	PM-8 & 26-S	Northcentral Grinder	1980	8,000 lbs/hr combined with PM-8-P	Baghouses PM-8A-C, PM-8-B-C & PM26-C
PM-8-P	PM-8 & 26-S	Northwest Grinder	1966	see above	Baghouses PM-8A-C, PM-8-B-C & PM26-C
PM-10A-P	PM-10A-S	Forge Furnace F2-21, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-10B-P	PM-10B-S	Forge Furnace F2-22, 10 mmbtu/hr	1989	6,375 lbs/hr	None
PM-11-P	PM-11-S	Forge Furnace F3, 57 mmbtu/hr	<1970	6,375 lbs/hr	None
PM-12A-P	PM-12A-S	Ingot Furnace F4-41, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-12B-P	PM-12B-S	Ingot Furnace F4-42, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-13-P	PM-13-S	Ingot Furnace F-5, 42 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-14-P	PM-14-S	Ingot Furnace F-6, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
PM-15-P	PM-15-S	Ingot Furnace F-7, 75.0 mmbtu/hr	<1970	9,000 lbs/hr	None
PM-16-P	PM-16-S	Ingot Furnace F-8, 36.0 mmbtu/hr	<1970	12,000 lbs/hr	None
PM-17A-P	PM-17A-S	Ingot Furnace F9-91, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-17B-P	PM-17B-S	Ingot Furnace F9-92, 12.0 mmbtu/hr	1992	5,670 lbs/hr	None
PM-18-P	PM-18-S	#1 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-19-P	PM-19-S	#3 Carbottom Furnace	<1970	18 mmbtu/hr	None
PM-20-P	PM-20-S	Plate Building Plasma Torch Thermal Dynamics Corp. PAK 10XR	1989	5,000 lbs/hr	Baghouse PM-20-C
PM-23-P	PM-23-S	Plate Anneal Furnace	1995	26 mmbtu/hr	None
PM-28-P	PM-28-S	Forge Furnace F-101, 15 mmbtu/hr	1998	13,000 lbs/hr	None
PM-29-P	PM-29-S	Forge Furnace F-102, 15 mmbtu/hr	1998	13,000 lbs/hr	None
Strip Mill (SM)					
SM-1-P	SM-1-S	CAP Line Pickling	1967	12,000 lbs/hr	Mist Elim. SM-1-C
SM-2-P	SM-2-S	Cap Shot Blaster	1967	12,000 lbs/hr	Wet Scrub SM-2-C
SM-3-P	SM-3-S	MKW Mill	1967	7,600 lbs/hr	Mist Elim. SM-3-C
SM-5-P	SM-5-S1,2,3,4	CAP Salt Bath, 6.9 mmbtu/hr	1969	12,000 lbs/hr	None
SM-6-P	SM-6-S	CAP Preheat Furnace, 20 mmbtu/hr	1967	12,000 lbs/hr	None
SM-7-P	SM-7-S	CAP Equalize Furnace, 16.5 mmbtu/hr	1967	12,000 lbs/hr	None
SM-10-P	SM-10-S	#2 CBU Grinder	1967	4,000 lbs/hr	Baghouse SM-10-C
Chipping Shop					
CS-1-P	CS-1-S	Schluter Grinder	1964	1,100 lbs/hr	Baghouse CS-1-C
CS-2-P	CS-2-S	Norton Grinder	1958	2,300 lbs/hr	Baghouse CS-2-C
CS-3-P	CS-3-S	#1 Centro-M Grinder	1966	2,100 lbs/hr	Baghouse CS-3-C
CS-4-P	CS-4-S	#2 Centro-M Grinder	1967	2,100 lbs/hr	Baghouse CS-4-C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Bar & Wire Mill					
BW-1A-P	BW-1A-S	23" Mill Furnace #1, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-1B-P	BW-1B-S	23" Mill Furnace #2, 15 mmbtu/hr	1971	3,600 lbs/hr	None
BW-2-P	BW-2-S	Walking Beam Furnace, 30 mmbtu/hr	1971	15,000 lbs/hr	None
BW-3-P	BW-3-S, BW-12-S	Wire Looping Section #1	1970	9,000 lbs/hr combined with BW-12-P	None
BW-12-P	BW-3-S, BW-12-S	Wire Looping Section #2	1971	see above	None
BW-10-P	BW-10-F	Scholle Saw	1971	9,000 lbs/hr	Baghouse BW-10-C
BW-11-P	BW-11-F	Abrasive Cut-off Machine	1971	9,000 lbs/hr	Baghouse BH-11-C
Vacuum Induction Melting					
VM-2-P	VM-2-S	V.I.M. Mold Preheat	1984	6 mmbtu/hr	None
B-4-P	B-4-S	V.I.M. Boiler	1984	26 mmbtu/hr	None
VM-5-P	VM-5-S	Tundish Drying Oven	1998	1.5 mmbtu/hr	None
Machine Shop					
MA-4-P	MA-4-S	Salem Tip-up Furnace	1993	14.46 mmbtu/hr	None
MA-5-P	MA-5-S	O'Brien and Gere 50' Tip-up Furnace	2015	15.2 mmbtu/hr	None
N/A	N/A	Cold Solvent Degreasers	<1993	Various	None
Cold Draw					
CD-1-P,CD-2-P	CD-1-S,CD-2-S	West Pickle Tanks 12-15	1958	31,500 gallons	None
CD-3-P,CD-4-P	CD-3-S,CD-4-S	West Pickle Tanks 9-11	1958	19,665 gallons	None
CD-5-P,CS-6-P	CD-5-S,CD-6-S	West Pickle Tank 8 & 9 (1/2 of tank 9 vents to CD-8S, CD-9S)	1958	31,000 gallons	None
CD-7-P,CD-8-P	CD-7-S,CD-8-S	West Pickle Tank #7	1958	8,000 gallons	None
CD-9-P,CD-10-P	CD-9-S,CD-10-S	West Pickle Tank #5	1958	8,650 gallons	None
CD-11-P,CD-12-P	CD-11-S,CD-12-S	West Pickle Tank #3	1958	11,000 gallons	None
CD-13-P,CD-14-P	CD-13-S,CD-14-S	East Pickle House; Tanks 51, 52, 53, 55, 56, 57, 58, and 59	1960	73,000 gallons	None
CD-17-P	CD-17-S	East Cutters (3 saws)	1960	550 lbs/hr	Baghouse CD-17-C
CD-23-P	CD-23-S	West Cutters (3 saws)	1966	720 lbs/hr	Baghouse CD-23-C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
CD-31-P	No stack	Grind Building Saw	1950	917 lbs/hr	None
CD-32-P	No stack	West Pickle Salt Bath, 7.2 mmBtu/hr	1998	7.2 mmBtu/hr	None
CD-38-P	CD-38-S	West Pickle Tanks #11	1958	12,000 gallons	Scrubber CD-38-C
CD-36-P	CD-36-S	Hard Chrome Plating; two chrome plating tanks, one etch tank, and one strip tank	1950	85 lbs/hr	Scrubber CD-36-C
CD-39-P	CD-39-S	Rod Cell Saw	1966	1,000 lbs/hr	None
CD-40-P	CD-40-E	Centro-Metalcut Type CAC 1220 Abrasive Saw	2010	5708 lbs/hr	Baghouse/ Cyclone CD-40-C
Carpenter Shop					
CA-1-P,CA-2-P	CA-1-S,CA-2	Woodcutting Operations	1958	3,000 lbs/hr	None
Service Center					
SC-1-P	SC-1-S	Wood Saw	<1970	1000 lbs/hr	None
SC-2-P	SC-2-S	Finish Saw	1970	1,000 lbs/hr	Scrubber SC-2-C
Thistle Processing, LLC					
TP-1P	TP-1-P	Tumble Blaster	2002	15,000 lbs/hr	Baghouse TP-10C
TP-3P	TP-3-P	Plasma Cutter	2002	5,000 lbs/hr	N/A
TP-4P	TP-4-P	Arc Cutter	2002	15,000 lbs/hr	N/A
TP-5P	TP-5-P	Arc Cutter w/additional booth	2006	15,000 lbs/hr	N/A
TP-6P	TP-6-P	Cabinet Blaster	2002	35,000 lbs/hr	Baghouse TP-10C
Scrap Metal Recycling					
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lbs/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lbs/hr	Cyclone TP-7A-1C, Thermal Oxidizer TP-7A-2C

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

Attachment E
Emission Units

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: B-1a-P	Emission unit name: Boiler	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 Located beside Bar & Wire, used to produce steam for entire facility.

Manufacturer: Victory Energy	Model number: VEO-13964	Serial number: 13964
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Construction date: 2017	Installation date: 2019	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 33.5 MMBtu/hr

Maximum Hourly Throughput: 33.5 MMBtu/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 31,905 SCFH	Type and Btu/hr rating of burners: 33,500,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
 Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	20961.37
Carbon Monoxide (CO)	--	14.66
Nitrogen Oxides (NO _x)	--	17.59
Lead (Pb)	--	0.0001
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	1.34
Total Particulate Matter (TSP)	--	1.34
Sulfur Dioxide (SO ₂)	--	0.10
Volatile Organic Compounds (VOC)	--	0.96
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	4.2E-06
3-Methylchloranthrene	--	3.1E-07
7,12-Dimethylbenz(a)anthracene	--	2.8E-06
Acenaphthene	--	3.1E-07
Acenaphthylene	--	3.1E-07
Anthracene	--	4.2E-07
Benzene	--	3.7E-04
Benzo(a)anthracene	--	3.1E-07
Benzo(a)pyrene	--	2.1E-07
Benzo(b)fluoranthene	--	3.1E-07
Benzo(g,h,i)perylene	--	2.1E-07
Benzo(k)fluoranthene	--	3.1E-07
Chrysene	--	3.1E-07
Dibenzo(a,h)anthracene	--	2.1E-07
Dichlorobenzene	--	2.1E-04
Fluoranthene	--	5.4E-07
Fluorene	--	5.0E-07
Formaldehyde	--	1.3E-02
Hexane	--	3.1E-01
Indenol(1,2,3,c,d)pyrene	--	3.1E-07
Naphthalene	--	1.0E-04
Phenanthrene	--	3.0E-06
Pyrene	--	8.8E-07

Toluene	--	5.9E-04
Arsenic	--	3.5E-05
Beryllium	--	2.1E-06
Cadmium	--	1.9E-04
Chromium	--	2.4E-04
Cobalt	--	1.5E-05
Manganese	--	6.7E-05
Mercury	--	4.6E-05
Nickel	--	3.7E-04
Selenium	--	4.2E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 5.36 pounds per hour for B-1a-P and B-4-P.
[45CSR§2-4.1.b.]

4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2.]

4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 190.4 pounds per hour for B-1a-P and B-4-P.
[45C SR§10-3.3.f.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Boiler, V.I.M. Boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
[40 CFR §60.40c(g)(1)]

As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
[40 CFR §60.40c(g)(2)]

As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [40 CFR §60.40c(g)(3)]

All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 CFR §60.40c(i)]

The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

[40 CFR §60.48c(a)(1)-(4)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: B-4-P	Emission unit name: VIM Boiler	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Vacuum Induction Melting Department used to produce steam in department.

Manufacturer: Clever Brooks	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26 MMBtu/hr

Maximum Hourly Throughput: tons/hr	Maximum Annual Throughput: tons/hr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 24,762 SCFH	Type and Btu/hr rating of burners: 26,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	14,566
Carbon Monoxide (CO)	--	10.0
Nitrogen Oxides (NO _x)	--	12.0
Lead (Pb)	--	6.1E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.92
Total Particulate Matter (TSP)	--	0.92
Sulfur Dioxide (SO ₂)	--	0.07
Volatile Organic Compounds (VOC)	--	0.67
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.9E-06
3-Methylchloranthrene	--	2.2E-07
7,12-Dimethylbenz(a)anthracene	--	1.9E-06
Acenaphthene	--	2.2E-07
Acenaphthylene	--	2.2E-07
Anthracene	--	2.9E-07
Benzene	--	2.5E-07
Benzo(a)anthracene	--	2.2E-07
Benzo(a)pyrene	--	1.5E-07
Benzo(b)fluoranthene	--	2.2E-07
Benzo(g,h,i)perylene	--	1.5E-07
Benzo(k)fluoranthene	--	2.2E-07
Chrysene	--	2.2E-07
Dibenzo(a,h)anthracene	--	1.5E-07
Dichlorobenzene	--	1.5E-04
Fluoranthene	--	3.6E-07
Fluorene	--	3.4E-07
Formaldehyde	--	9.1E-03
Hexane	--	0.22
Indenol(1,2,3,c,d)pyrene	--	2.2E-07
Naphthalene	--	7.4E-05
Phenanthrene	--	2.1E-06
Pyrene	--	6.1E-07

Toluene	--	4.1E-04
Arsenic	--	2.4E-05
Beryllium	--	1.5E-06
Cadmium	--	1.3E-04
Chromium	--	1.7E-04
Cobalt	--	1.0E-05
Manganese	--	4.6E-05
Mercury	--	3.2E-05
Nickel	--	2.5E-04
Selenium	--	2.9E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the product of 0.09 and the total design heat input in million B.T.U.'s per hour: 9.54 pounds per hour for B-1-P and B-4-P.
[45CSR§2-4.1.b.]

4.1.3. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.
[45CSR§2-4.2.]

4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4.]

4.1.5. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

4.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour: 339.2 pounds per hour for B-1-P and B-4-P.
[45CSR§10-3.3.f.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 - 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 - 2. Excess opacity does not exceed 40%.
- b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 - 1. A detailed explanation of the factors involved or causes of the malfunction;
 - 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 - 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 - 4. The maximum opacity measured or observed during the malfunction;
 - 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-1A-P	Emission unit name: 23" Mill Furnace #1	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used in heating alloy cogs for bar and wire products.

Manufacturer: Flinn	Model number:	Serial number:
Construction date: 1969	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.8 Ton/hr

Maximum Hourly Throughput: 1.8 Ton/hr	Maximum Annual Throughput: 15,768 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.51
Total Particulate Matter (TSP)	--	0.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.04
Cobalt	--	0
Copper	--	9.2E-03
Manganese	--	5.6E-03
Nickel	--	0.20
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4 .1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-1B-P	Emission unit name: 23" Mill Furnace #2	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used in heating alloy cogs for bar and wire products.

Manufacturer: Flinn	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.8 tons/hr

Maximum Hourly Throughput: 1.8 tons/hr	Maximum Annual Throughput: 15,768 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit BW-1A-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit BW-1A-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-2-P	Emission unit name: Walking Beam Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Furnace located in the Bar and Wire Mill and is used for wire products.

Manufacturer: Selas	Model number:	Serial number:
Construction date: 2/1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7.5 tons/hr

Maximum Hourly Throughput: 7.5 tons/hr	Maximum Annual Throughput: 65,700 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 26,667 SCFH	Type and Btu/hr rating of burners: 28,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-3-P BW-12-P	Emission unit name: Looping Section 1 Looping Section 2	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

These units are located in the Bar and Wire Department. The looping sections are used in the manufacturing of wire products.

Manufacturer: Looping Section 1 —Kocks Looping Section 2 – Morgands Hammen	Model number:	Serial number:
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Construction date: Section 1- 1970 Section 2- 1971	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 4.5 Ton/hr.

Maximum Hourly Throughput: 4.5 Ton/hr.	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	3.60
Total Particulate Matter (TSP)	--	3.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.25
Cobalt	--	0
Copper	--	0.07
Manganese	--	0.04
Nickel	--	1.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wire Looping Section #1	BW-3-P	3.7
Wire Looping Section #2	BW-12-P	4.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-10-P	Emission unit name: Scholle Saw	List any control devices associated with this emission unit: Baghouse BW-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The saw is used to cut pieces coming out of the Bar and Wire Mill.

Manufacturer: Scholle	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4.5 Ton/hr

Maximum Hourly Throughput: 4.5 Ton/hr	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.20
Total Particulate Matter (TSP)	--	1.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.08
Cobalt	--	0
Copper	--	0.02
Manganese	--	0.01
Nickel	--	0.46
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Scholle Saw	BW-10-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BW-11-P	Emission unit name: Abrasive Cut-Off Machine	List any control devices associated with this emission unit: Baghouse BW-11-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The saw is used to cut pieces coming out of the Bar and Wire Mill.

Manufacturer: Tysman	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4.5 Ton/hr

Maximum Hourly Throughput: 4.5 Ton/hr	Maximum Annual Throughput: 39,420	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.58
Total Particulate Matter (TSP)	--	0.58
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.04
Cobalt	--	0
Copper	--	0.01
Manganese	--	6.4E-03
Nickel	--	0.22
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Abrasive Cut-off Machine	BW-11-P	7.1

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CA-1-P	Emission unit name: Carpenter Shop Woodcutting Operations	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: 1958	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 Ton

Maximum Hourly Throughput: 1.5 Ton	Maximum Annual Throughput: 28,470 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.40
Total Particulate Matter (TSP)	--	1.40
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Mass Balance		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-1-P	3

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CA-2-P	Emission unit name: Carpenter Shop Woodcutting Operations	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: 1958	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 Ton

Maximum Hourly Throughput: 1.5 Ton	Maximum Annual Throughput: 28,470 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.77
Total Particulate Matter (TSP)	--	0.77
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Mass Balance</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Woodcutting Operations	CA-2-P	3

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-1-P CD-2-P	Emission unit name: West Pickle Tanks 12-15	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 31,500 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	6.5
Total Particulate Matter (TSP)	--	6.5
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	0.04
Nitric Acid (HNO ₃)	--	6.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-3-P CD-4-P	Emission unit name: West Pickle Tanks 9-11	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 19,665 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	7.8
Total Particulate Matter (TSP)	--	7.8
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	3.1
Sulfuric Acid (H ₂ SO ₄)	--	0.01
Nitric Acid (HNO ₃)	--	4.2
Ammonia (NH ₃)	--	0.45
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-5-P CD-6-P	Emission unit name: West Pickle Tanks 8,9	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 31,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.1
Total Particulate Matter (TSP)	--	2.1
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	0.35
Sulfuric Acid (H ₂ SO ₄)	--	0.61
Nitric Acid (HNO ₃)	--	1.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-7-P CD-8-P	Emission unit name: West Pickle Tank #7	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 8,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.10
Total Particulate Matter (TSP)	--	1.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nitric Acid (HNO ₃)	--	0.97
Hydrofluoric Acid (HF)	--	0.08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-9-P CD-10-P	Emission unit name: West Pickle Tank #5	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 8,650 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.30
Total Particulate Matter (TSP)	--	1.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nitric Acid (HNO ₃)	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-11-P CD-12-P	Emission unit name: West Pickle Tank #3	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 11,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 19,214 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.16
Total Particulate Matter (TSP)	--	0.16
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	0.16
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-13-P CD-14-P	Emission unit name: East Pickle	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides. Includes east pickle house tanks 51, 52, 53, 55, 56, 57, 58, 59.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1960	Installation date: 1960	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 73,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput: 3,713 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	4.40
Total Particulate Matter (TSP)	--	4.40
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Sulfuric Acid (H ₂ SO ₄)	--	1.00
Nitric Acid (HNO ₃)	--	3.10
Hydrofluoric Acid (HF)	--	0.33
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-17-P	Emission unit name: East Cutters (3 Saws)	List any control devices associated with this emission unit: CD-17-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy rod cutting.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1960	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.275 tons/hr

Maximum Hourly Throughput: 0.275 tons/hr	Maximum Annual Throughput: 2,409 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	3.7E-03
Cobalt	--	2.8E-06
Copper	--	1.2E-04
Manganese	--	1.1E-04
Nickel	--	8.2E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
East Cutters (3 Saws)	CD-17-P	0.43

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-23-P	Emission unit name: West Cutters (3 Saws)	List any control devices associated with this emission unit: Baghouse CD-23-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy rod Cutting.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.36 tons/hr

Maximum Hourly Throughput: 0.36 tons/hr	Maximum Annual Throughput: 3154 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.36
Total Particulate Matter (TSP)	--	0.36
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.05
Cobalt	--	3.6E-05
Copper	--	1.5E-03
Manganese	--	1.4E-03
Nickel	--	0.11
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
West Cutters (3 Saws)	CD-23-P	0.57

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-31-P	Emission unit name: Grind Building Saw	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Small alloy rod cutting to length.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1950	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.46 tons/hr

Maximum Hourly Throughput: 0.46 tons/hr	Maximum Annual Throughput: 4,030 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.01
Cobalt	--	8.7E-06
Copper	--	3.8E-04
Manganese	--	3.3E-04
Nickel	--	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Grind Building Saw	CD-31-P	0.72

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-32-P	Emission unit name: West Pickle Salt Bath	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Surface treatment to remove oxides from products.

Manufacturer: Kolene	Model number:	Serial number:
Construction date: < 1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7.2 mmbtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,857 SCFH	Type and Btu/hr rating of burners: 7,200,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	3,604
Carbon Monoxide (CO)	--	2.50
Nitrogen Oxides (NO _x)	--	3.00
Lead (Pb)	--	1.5E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.23
Total Particulate Matter (TSP)	--	0.23
Sulfur Dioxide (SO ₂)	--	0.02
Volatile Organic Compounds (VOC)	--	0.17
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	7.2E-07
3-Methylchloranthrene	--	5.4E-08
7,12-Dimethylbenz(a)anthracene	--	4.8-E07
Acenaphthene	--	5.4E-08
Acenaphthylene	--	5.4E-08
Anthracene	--	7.2E-08
Benzene	--	6.3E-05
Benzo(a)anthracene	--	5.4E-08
Benzo(a)pyrene	--	3.6E-08
Benzo(b)fluoranthene	--	5.4E-08
Benzo(g,h,i)perylene	--	3.6E-08
Benzo(k)fluoranthene	--	5.4E-08
Chrysene	--	5.4E-08
Dibenzo(a,h)anthracene	--	3.6E-08
Dichlorobenzene	--	3.6E-05
Fluoranthene	--	9.0E-08
Fluorene	--	8.4E-08
Formaldehyde	--	2.3E-03
Hexane	--	0.05
Indenol(1,2,3,c,d)pyrene	--	5.4E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.8E-05
Phenanthrene	--	5.1E-07
Pyrene	--	1.5E-07
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	--	1.0E-04
Arsenic	--	6.0E-06
Beryllium	--	3.6E-07
Cadmium	--	3.3E-05
Chromium	--	4.2E-05
Cobalt	--	2.5E-06
Manganese	--	1.1E-05
Mercury	--	7.8E-06
Nickel	--	6.3E-05
Selenium	--	7.2E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-36-P	Emission unit name: Cold Draw Hard Chrome Plating	List any control devices associated with this emission unit: CD-36-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two hard chrome plating tanks utilized for placing a thick chrome layer on various tools & dies used in the cold draw department primarily, but also in other areas of the plant. The process unit consists of primary and secondary chrome plating tanks. Tank #2 is the primary tank and it has an electrical capacity of 600 amps. Tank #1 is the secondary tank and it has an electrical capacity of 400 amps. Both tank's contents consist of 440 pounds of chromic acid and 800 liters of sulfuric acid. In addition to the two chromic acid tanks there is a sulfuric etch tank and there is a stripping tank.

The hard chrome plating process at our facility is a "small" hard chrome plating process according to EPA standards. Our maximum potential cumulative rectifier capacity of 5,880,000 amp-hrs/yr. is far below the 60,000,000 amp-hrs/yr small source cutoff.

Manufacturer: Unknown	Model number:	Serial number:
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Construction date: 01/01/1950	Installation date: 05/01/1950	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,880,000 amp-hrs/yr

Maximum Hourly Throughput: 12 tons/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	6.1E-05
Total Particulate Matter (TSP)	--	6.1E-05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	5.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>A stack test was conducted on this source in December, 1996 to determine compliance with the NESHAP regulatory limits. The source was found to be in compliance with the NESHAP emission limitation for the hard chromium plating subcategory.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

12.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from the Die Room Chrome Plater in excess of 0.19 lb/hr.
[45CSR§7-4.1.]

12.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1]

12.1.3. During tank operation, each owner or operator of an existing affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5} gr/dscf).
[45CSR34 and 40 C.F.R. § 63.342(c)(1)(ii)]

12.1.4. The work practice standards of this section address operation and maintenance practices. All owners or operators subject to the standards of this section are subject to these work practice standards.

(1) (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by Section 12.1.4.(2) of this permit.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by Section 12.1.4.(2) of this permit.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

[45CSR34 and 40 C.F.R. § 63.342(f)(1)]

(2) (i) The owner or operator of an affected source subject to the work practices of Section 12.1.4.(1) of this permit shall prepare an operation and maintenance plan to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit. The plan shall include the elements listed in 40 C.F.R. § 63.342(f)(3) (A) through (E).

(ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(iii) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by Section 12.1.4.(2)(i) of this permit, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.

(iv) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 C.F.R. 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

[45CSR34 and 40 C.F.R. § 63.342(f)(3)]

12.1.5. An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of 40 C.F.R. § 63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 40 C.F.R. §§ 63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in 40 C.F.R. § 63.343(a)(1)(ii), whichever is later.
[45CSR34 and 40 C.F.R. § 63.343(a)(5)]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

12.3.1. Performance tests shall be conducted using the test methods and procedures in sections 40 C.F.R. §§ 63.344(c)(1), 63.344(d)(2)(ii), 63.344(d)(5), 63.344(e)(2), and 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(9) of 40 C.F.R. § 63.344. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.
[45CSR34 and 40 C.F.R. § 63.344(a)]

12.4.1. (a) The owner or operator of each affected source subject to the standards of 40 C.F.R. § 63.346 shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N.

(b) The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart N shall maintain the records listed in 40 C.F.R. § 63.346 (b) (1) through (16) for such source.

(1) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 C.F.R. § 63.342(f) and Table 1 of 40 C.F.R. § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

(2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;

(3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;

(4) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;

(5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 C.F.R. § 63.342(f)(3);

(6) Test reports documenting results of all performance tests;

(7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 C.F.R. § 63.344(e);

(8) Records of monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;

(9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;

(10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;

(11) The total process operating time of the affected source during the reporting period;

(12) All documentation supporting the notifications and reports required by 40 C.F.R. §§ 63.9, 63.10, and 63.347.

(c) All records shall be maintained for a period of 5 years in accordance with 40 C.F.R. § 63.10(b)(1).

[45CSR34 and 40 C.F.R. § 63.346]

12.5.1. The owner or operator of each affected source subject to the standards of 40 C.F.R. 63 Subpart N shall fulfill all reporting requirements in accordance with 40 C.F.R. § 63.347 and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 C.F.R. 63 Subpart N. These reports shall be made to the Administrator at the appropriate address as identified in 40 C.F.R. § 63.13 or to the delegated State authority.

[45CSR34 and 40 C.F.R. § 63.347(a)]

12.5.2. Ongoing compliance status reports for major sources. The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in Section 12.5.3. of this permit, and shall be submitted semiannually unless the conditions in 40 C.F.R. § 63.347(g)(1)(i) or (ii) are met.

[45CSR34 and 40 C.F.R. § 63.347(g)]

12.5.3. Contents of ongoing compliance status reports. The owner or operator of an affected source for which compliance monitoring is required in accordance with 40 C.F.R. § 63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the information listed in 40 C.F.R. § 63.347(g)(3).

[45CSR34 and 40 C.F.R. § 63.347(g)(3)]

12.5.4. When more than one monitoring device is used to comply with the continuous compliance monitoring required by 40 C.F.R. § 63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of 40 C.F.R. 63 Subpart N. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

[45CSR34 and 40 C.F.R. § 63.347(g)(4)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-38-P	Emission unit name: West Pickle Ammonia Tank	List any control devices associated with this emission unit: CD-38-C Ammonia Scrubber
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The pickling process is to surface treat batches of alloy to remove metal oxides.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1958	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,000 Gallons

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit CD-3-P & CD-4-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit CD-3-P & CD-4-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-39-P	Emission unit name: Rod Cell Saw	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy tube cutting to length.

Manufacturer: Savage	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 tons/hr

Maximum Hourly Throughput: 0.5 tons/hr	Maximum Annual Throughput: 4380 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.01
Cobalt	--	9.5E-06
Copper	--	4.1E-04
Manganese	--	3.6E-04
Nickel	--	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CD-40-P	Emission unit name: Centro Metalcut Type CAC 1220 Abrasive Saw	List any control devices associated with this emission unit: CD-40-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Alloy tubes, rods, and rounds will be taken to the saw to be finish cut into customer specifications.

Manufacturer: Centro-Metalcut	Model number: CAC 1220	Serial number:
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Construction date: 2010	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,708 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	5.60
Total Particulate Matter (TSP)	--	5.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.56
Cobalt	--	0.14
Copper	--	0.27
Manganese	--	0.03
Nickel	--	2.50
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Volume removed from saw blade thickness and baghouse control efficiency.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Centro-Metalcut Type CAC 1220 Abrasive Saw	CD-40-P	5.71

[45CSR§7-4.1., 45CSR13 – R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

7.1.3. The maximum weight of alloy to be processed in the abrasive saw CD-40-P shall not exceed 25,000 tons per year based on a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of the alloy processed, in tons per month, at any given time for the previous twelve consecutive calendar months.

[45CSR§30-5.1.c. and 45CSR13-R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.2.4. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.2.5. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.4.2. Record of Maintenance of Air Pollution Control Equipment. For Baghouse/Cyclone CD-40-C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2163]

7.4.3. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse/Cyclone CD-40-C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2163]

7.4.4. For the purpose of determining compliance with Condition 7.1.3., the facility shall maintain monthly records. At a minimum, the record shall contain the information outlined in the example record keeping forms that were appended to permit R13-2163A which includes; the month, the process weight throughput for the current month and the rolling yearly total, and the hours of operation. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement provided with R13-2163A, which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director or his duly authorized representative upon request. The permittee may propose to the Director a different form of recordkeeping from that described.

[45CSR§30-5.1.c., 45CSR13, R13-2163]

7.4.5. The permittee shall maintain records of all monitoring data required by Sections 7.2.4. and 7.2.5. documenting the date and time of each inspection, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-2163]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-1-P	Emission unit name: Schluter Grinder	List any control devices associated with this emission unit: Baghouse CS-1-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Schluter	Model number:	Serial number:
Construction date: 1964	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.55 tons/hr

Maximum Hourly Throughput: 0.55 tons/hr	Maximum Annual Throughput: 4,818 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.51
Total Particulate Matter (TSP)	--	0.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.07
Cobalt	--	3.6E-03
Copper	--	0.03
Manganese	--	2.7E-03
Nickel	--	0.27
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Schluter Grinder	CS-1-P	0.41

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-2-P	Emission unit name: Norton Grinder	List any control devices associated with this emission unit: Baghouse CS-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Norton	Model number:	Serial number:
Construction date: 1958	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.15 tons/hr

Maximum Hourly Throughput: 1.15 tons/hr	Maximum Annual Throughput: 10,074 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.10
Total Particulate Matter (TSP)	--	1.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.14
Cobalt	--	7.6E-03
Copper	--	0.06
Manganese	--	5.6E-03
Nickel	--	0.57
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Norton Grinder	CS-2-P	0.85

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-3-P	Emission unit name: # 1 Centro-M Grinder	List any control devices associated with this emission unit: Baghouse CS-3-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Centro Maskin	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.05 tons/hr

Maximum Hourly Throughput: 1.05 tons/hr	Maximum Annual Throughput: 9,198 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.98
Total Particulate Matter (TSP)	--	0.98
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.13
Cobalt	--	6.9E-03
Copper	--	0.06
Manganese	--	5.1E-03
Nickel	--	0.52
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#1 Centro-M Grinder	CS-3-P	0.77

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CS-4-P	Emission unit name: #2 Centro-M Grinder	List any control devices associated with this emission unit: Baghouse CS-4-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to grind the surface of alloy cogs.

Manufacturer: Centro Maskin	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.05 tons/hr

Maximum Hourly Throughput: 1.05 tons/hr	Maximum Annual Throughput: 9,198 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.98
Total Particulate Matter (TSP)	--	0.98
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.13
Cobalt	--	7.0E-03
Copper	--	0.06
Manganese	--	5.1E-03
Nickel	--	0.52
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#2 Centro-M Grinder	CS-4-P	0.78

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MA-4-P	Emission unit name: Salem Tip-up Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one Heat Treat furnace located in the Machine Shop department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the heat treating (annealing) of alloy products.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 12/01/1993	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14.46 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 13,771 SCFH	Type and Btu/hr rating of burners: 14,460,000 Btu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2.5 ppm	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,238
Carbon Monoxide (CO)	--	5.1
Nitrogen Oxides (NO _x)	--	3.0
Lead (Pb)	--	3.0E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.46
Total Particulate Matter (TSP)	--	0.46
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	1.4E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	9.7E-07
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.4E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.2E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.2E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.2E-08
Dichlorobenzene	--	7.2E-05
Fluoranthene	--	1.8E-07
Fluorene	--	1.7E-07
Formaldehyde	--	4.5E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.7E-05
Phenathrene	--	1.0E-06
Pyrene	--	3.0E-07
Toluene	--	2.1E-04
Arsenic	--	1.2E-05
Beryllium	--	7.2E-07
Cadmium	--	6.6E-05
Chromium	--	8.4E-05
Cobalt	--	5.1E-06
Manganese	--	2.3E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.4. In accordance with the permit application and its amendments, discharge from the Salem Tip-up furnace (MA-4-P) to the roof vent fans shall not exceed the following limitations:

Particulate	0.07 lb/hr
SO2	0.01 lb/hr
NOx	1.93 lb/hr
CO	0.48 lb/hr
VOC	0.04 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1646 and 45CSR§7-4.1.]

5.1.5. In accordance with the permit application and its amendments, natural gas consumption in the Salem Tip-up furnace (MA-4-P) shall not exceed 13,800 cf/hr.
[45CSR13 - R13-1646]

5.1.6. In accordance with the permit application and its amendments, the Salem Tip-up furnace (MA-4-P) shall not process more than 20,000 lb/hr of alloy rods.
[45CSR13 - R13-1646]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

5.4.1. The permittee shall maintain records showing the amount of natural gas fired monthly in the Salem Tip-up furnace (MA-4-P) as required in Section 5.1.5. Such records shall be maintained by the permittee for at least three (3) years. Monthly records shall be made available to the Director or his duly authorized representative upon request. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1646]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MA-5-P	Emission unit name: MA-5-P Tip up furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 This emission unit consists of one Heat Treat furnace located in the Machine Shop department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the heat treating (annealing) of alloy products.

Manufacturer: O'Brien and Gere	Model number: 50'	Serial number:
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Construction date: 2015	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 15.2 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 14,476 SCFH	Type and Btu/hr rating of burners: 15,200,000 Btu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

 Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2.5	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,238
Carbon Monoxide (CO)	--	5.1
Nitrogen Oxides (NO _x)	--	3.0
Lead (Pb)	--	3.0E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.46
Total Particulate Matter (TSP)	--	0.46
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	1.4E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	9.7E-07
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.4E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.2E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.2E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.2E-08
Dichlorobenzene	--	7.2E-05
Fluoranthene	--	1.8E-07
Fluorene	--	1.7E-07
Formaldehyde	--	4.5E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.7E-05
Phenathrene	--	1.0E-06
Pyrene	--	3.0E-07
Toluene	--	2.1E-04
Arsenic	--	1.2E-05
Beryllium	--	7.2E-07
Cadmium	--	6.6E-05
Chromium	--	8.4E-05
Cobalt	--	5.1E-06
Manganese	--	2.3E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.4E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.4. In accordance with the permit application and its amendments, discharge from the MA-S-P Tip-up furnace to the roof vent fans shall not exceed the following limitations:

Particulate	0.11 lb/hr
SO2	0.01 lb/hr
NOx	1.45 lb/hr
CO	1.22 lb/hr
VOC	0.08 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1. [45CSR13 - R13-1646 and 45CSR§7-4.1.]

5.1.5. In accordance with the permit application and its amendments, natural gas consumption in the MA-5-P Tip-up furnace shall not exceed 14,476 cf/hr.
[45CSR13 - R13-1646]

5.1.6. In accordance with the permit application and its amendments, the Tip-up furnace MA-5-P shall not process more than 30,000 lb/hr of alloy rods.
[45CSR13 - R13-1646]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-A	Emission unit name: Argon Oxygen Reactor (AOD)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used to introduce oxygen and argon to a melted alloy heat of metal to improve the quality.

Manufacturer: Pecor	Model number:	Serial number:
Construction date: 1971	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Furnace dust chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Argon Oxygen Reactor	MS-1A	13.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-B	Emission unit name: #5 Electric Arc Furnace (EAF)	List any control devices associated with this emission unit: Baghouses MS-I -C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used on the melting of non-ferrous nickel alloys.

Manufacturer: Lectromag	Model number:	Serial number:
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Construction date: 1971	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Dust chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#5 Electric Arc Furnace	MS-1B	11.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4 .1]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1-D	Emission unit name: #4 Electric Arc Furnace (EAF)	List any control devices associated with this emission unit: Baghouses MS-1-C1 & MS-1-C2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Refinery Melt Shop. The unit is used on the melting of non-ferrous nickel alloys.

Manufacturer: Lectromag	Model number:	Serial number:
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Construction date: 1966	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
17.5 tons/hr

Maximum Hourly Throughput: 17.5 tons/hr	Maximum Annual Throughput: 153,300 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.80
Total Particulate Matter (TSP)	--	2.80
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.09
Cobalt	--	2.5E-03
Copper	--	0.08
Lead	--	1.2E-03
Manganese	--	0.03
Mercury	--	4.3E-05
Nickel	--	0.41
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42, Bag-House Dust Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source or operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#4 Electric Arc Furnace	MS-1D	11.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

6.2.2. The permittee shall demonstrate compliance with the sulfur dioxide emission limit in Section 6.1.3. for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) by monitoring in accordance with an approved monitoring plan. The approved monitoring plan requires the permittee to identify and record the highest sulfur containing batch/heat/melt that is charged in to the electric arc furnaces on a monthly basis. The sulfur will be measured in total percent sulfur by weight, then converted to a maximum monthly concentration of sulfur dioxide emitted by the dust collector.

[45CSR§30-5.1.c.]

6.4.2. In accordance with the approved monitoring plan, the permittee shall keep monthly records of the Highest Monthly Heat Sulfur Percentage and Equivalent maximum monthly SO₂ emissions from the baghouse in parts per million for the Argon Oxygen Reactor (MS-1A) and the #4 and #5 Electric Arc Furnaces (MS-1B, MS-1D) on the form submitted in the approved monitoring plan.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-1E-P	Emission unit name: Wire Feeder	List any control devices associated with this emission unit: MS-1-C2, MS-1-C1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Melt Shop, used for adding raw wire materials into the ladle.

Manufacturer: PC Campana	Model number:	Serial number:
Construction date: 2005	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35 Tons/hr

Maximum Hourly Throughput: 35 Tons/hr	Maximum Annual Throughput: 306,600 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit MS-1D		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1.]

6.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.
[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-2-P	Emission unit name: Powder Torch	List any control devices associated with this emission unit: Baghouse MS-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located on the north side of the Refinery Melt Shop. The powder torch is used in cutting scrap metal into smaller more manageable pieces that can be placed back into the furnaces.

Manufacturer: Lindle	Model number:	Serial number:
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Construction date: 1962	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35 tons/hr

Maximum Hourly Throughput: 35 tons/hr	Maximum Annual Throughput: 306,600 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes ___ <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.0E-03
Cobalt	--	2.8E-05
Copper	--	8.5E-04
Manganese	--	3.7E-04
Nickel	--	4.5E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Bag-House Dust Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Powder Torch	MS-2	5.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: MS-9-P	Emission unit name: Lime Storage Silo	List any control devices associated with this emission unit: Baghouse MS-9-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This process group consists of two lime storage bins located at the melt shop. The lime storage bin is the conveying method for pebble lime that is utilized by the melt shop as a raw material in alloy production. The lime bin has a control device to capture lime emissions during bin loading operations. The baghouse dust collector is mounted in the roof of the storage bin.

Manufacturer: Unknown	Model number:	Serial number:
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Construction date: 1975	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15 Tons/hour

Maximum Hourly Throughput:	Maximum Annual Throughput: 5,979 Tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.10
Total Particulate Matter (TSP)	--	0.10
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Reg. 7 Sections 3.1 and 3.2 - The emission methods utilized to determine actual emission rates were as follows:</p> <p>1. 99.9% efficiency baghouse - manufacturers data</p> <p>Emission rate limits based on average pound per hour process rates (and duplicate sources where applicable) were calculated and compared to the estimated emissions of each process.</p> <p>Reg.7. Actual Emissions & Allowable Emission Rates Pounds per Hour</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

10.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure associated with any manufacturing process that pursuant to 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]

10.1.2. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

10.1.3. In accordance with the information filed in Permit Application R13-0137, and any amendments or revisions thereto, the Lime Storage Silos shall be equipped with a baghouse dust collector.
[45CSR13 - R13-0137]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

10.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

10.4.1. The permittee shall maintain the design information on the baghouse at the facility.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-1 & 2-P	Emission unit name: #1 Primary Rolling Mill	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Primary Mill Department. The equipment is used for the rolling of alloy into plates.

Manufacturer: Mesta	Model number:	Serial number:
Construction date: 1964	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50 tons/hr

Maximum Hourly Throughput: 50 tons/hr	Maximum Annual Throughput: 438,000 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	17.0
Total Particulate Matter (TSP)	--	17.0
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.20
Cobalt	--	0
Copper	--	0.31
Manganese	--	0.19
Nickel	--	6.80
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Emission Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
#1 Primary Rolling Mill	PM-1&2P	24.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-3-P	Emission unit name: Plasma Cutting Torch	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located in the Primary Mill Department. The equipment is used for the cutting of alloy slabs.

Manufacturer: Thermal Dynamics	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 tons/hr

Maximum Hourly Throughput: 1.5 tons/hr	Maximum Annual Throughput: 13,140 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.80
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.25
Cobalt	--	6.7E-03
Copper	--	0.06
Manganese	--	0.01
Nickel	--	1.10
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plasma Torch	PM-3-P	3.0

[45CSR§7-4.1.]

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-4-P	Emission unit name: Grit Blaster (Plate Cleaning Machine)	List any control devices associated with this emission unit: Baghouse PM-4-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 Located in the Primary Mill, used to surface clean large plate product.

Manufacturer: Pangborn	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.95 tons/hr

Maximum Hourly Throughput: 1.95 tons/hr	Maximum Annual Throughput: 17,802 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes ___ <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	1.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.15
Cobalt	--	1.2E-04
Copper	--	5.0E-03
Manganese	--	4.4E-03
Nickel	--	0.34
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42 Emissions Chemistry</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Plate Cleaning Machine	PM-4-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-5-P	Emission unit name: Southeast Grinder	List any control devices associated with this emission unit: Baghouse PM-5-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Midwest	Model number:	Serial number:
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Construction date: 1980	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.30
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southeast Grinder	PM-5-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-6-P	Emission unit name: Southwest Grinder	List any control devices associated with this emission unit: Baghouse PM-6 & 25-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Centro Maskin	Model number:	Serial number:
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Construction date: 1974	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.3
Total Particulate Matter (TSP)	--	2.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southwest Grinder	PM-6-P	2.99

[45CSR§7-4.1., 45CSR13 – R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-7-P	Emission unit name: Northeast Grinder	List any control devices associated with this emission unit: Baghouse PM-7-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Centro Maskin	Model number:	Serial number:
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Construction date: 1965	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northeast Grinder	PM-7-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-8-P	Emission unit name: Northwest Grinder	List any control devices associated with this emission unit: Baghouse PM-8-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Tysamen	Model number:	Serial number:
Construction date: 1966	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northwest Grinder	PM-8-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-10A-P PM-10B-P	Emission unit name: F-2 Forge Furnace 21 F-2 Forge Furnace 22	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating (forging) furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Olsen	Model number:	Serial number:
Construction date: 1989	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 3.1875 tons/hr each

Maximum Hourly Throughput: 3.1875 tons/hr each	Maximum Annual Throughput: 27,922.5 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 9,524 SCFH	Type and Btu/hr rating of burners: 10,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	245,048
Carbon Monoxide (CO)	--	172
Nitrogen Oxides (NO _x)	--	204
Lead (Pb)	--	1.0E-03
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	16.0
Total Particulate Matter (TSP)	--	16.0
Sulfur Dioxide (SO ₂)	--	1.20
Volatile Organic Compounds (VOC)	--	11.0
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	4.9E-05
3-Methylchloranthrene	--	3.7E-06
7,12-Dimethylbenz(a)anthracene	--	3.3E-05
Acenaphthene	--	3.7E-06
Acenaphthylene	--	3.7E-06
Anthracene	--	4.9E-06
Benzene	--	4.3E-03
Benzo(a)anthracene	--	3.7E-06
Benzo(a)pyrene	--	2.5E-06
Benzo(b)fluoranthene	--	3.7E-06
Benzo(g,h,i)perylene	--	2.5E-06
Benzo(k)fluoranthene	--	3.7E-06
Chrysene	--	3.7E-06
Dibenzo(a,h)anthracene	--	2.5E-06
Dichlorobenzene	--	2.5E-03
Fluoranthene	--	6.1E-06
Fluorene	--	5.7E-06
Formaldehyde	--	0.15
Hexane	--	3.7
Indenol(1,2,3,c,d)pyrene	--	3.7E-06

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.2E-03
Pyrene	--	1.0E-05
Toluene	--	6.9E-03
Arsenic	--	4.1E-04
Beryllium	--	2.5E-05
Cadmium	--	2.2E-03
Chromium	--	2.9E-03
Cobalt	--	1.7E-04
Manganese	--	7.8E-04
Mercury	--	5.3E-04
Nickel	--	4.3E-03
Selenium	--	4.9E-05
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-11-P	Emission unit name: F-3 Forge Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating (forging) furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air through a dedicated stack. The furnace is used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Salem	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3.1875 tons/hr

Maximum Hourly Throughput: 3.1875 tons/hr	Maximum Annual Throughput: 27,922.5 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 54,286 SCFH	Type and Btu/hr rating of burners: 57,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 40CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Forge Furnace F3	PM-11-P	6.38

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR §10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-12A-P PM-12B-P	Emission unit name: F-4 Ingot Furnace 41 F-4 Ingot Furnace 42	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: A- 1992 B- 1992	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 2.835 tons/hr each

Maximum Hourly Throughput: 2.835 tons/hr each	Maximum Annual Throughput: 24,834.6 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 11,429 SCFH	Type and Btu/hr rating of burners: 12,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-13-P	Emission unit name: F-5 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air. The furnace is used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 40,000 SCFH	Type and Btu/hr rating of burners: 42,000,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P.		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P.		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Ingot Furnace F-5	PM-13-P	11.20

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-14-P PM-15-P	Emission unit name: F-6 Ingot Furnace F-7 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Flinn & Dreffein	Model number:	Serial number:
Construction date: <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 4.5 tons/hr each

Maximum Hourly Throughput: 4.5 tons/hr each	Maximum Annual Throughput: 39,420 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 71,429 SCFH	Type and Btu/hr rating of burners: 75,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Ingot Furnace F-6	PM-14-P	9.00
Ingot Furnace F-7	PM-15-P	9.00

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-16-P	Emission unit name: F-8 Ingot Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one ingot heating furnace located within the primary mill department. The furnace is natural gas fired and it vents products of combustion emissions to outside air. The furnace is used for the heating of alloy ingots.

Manufacturer: Flinn & Dreffein	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 34,286 SCFH	Type and Btu/hr rating of burners: 36,000,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-17A-P PM-17B-P	Emission unit name: F-9 Ingot Furnace 91 F-9 Ingot Furnace 92	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots.

Manufacturer: Salem	Model number:	Serial number:
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Construction date: 1992	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 2.835 tons/hr each

Maximum Hourly Throughput: 2.835 tons/hr each	Maximum Annual Throughput: 24,834.6 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 11,429 SCFH	Type and Btu/hr rating of burners: 12,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.71]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-18-P PM-19-P	Emission unit name: #1 Carbottom Furnace #3 Carbottom Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two heating furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy plate and coil products.

Manufacturer: Modern Industrial Heating	Model number:	Serial number:
Construction date: #1 <1970 #3 <1970	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 18.0 mmbtu/hr each

Maximum Hourly Throughput: 18.0 mmbtu/hr each	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 17,143 SCFH	Type and Btu/hr rating of burners: 18,000,000 each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-20-P	Emission unit name: PM Plate Plasma Torch	List any control devices associated with this emission unit: Baghouse PM-20-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The plasma torch is a gas cutting torch that is utilized for squaring up the ends of plate alloy stock before it is processed through the stretch leveler.

Manufacturer: Thermal Dynamics Corp.	Model number: PAK 10XR	Serial number:
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Construction date: 10/01/1989	Installation date: 10/15/1989	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2.5 tons/hr

Maximum Hourly Throughput: 2.5 tons/hr	Maximum Annual Throughput: 21,900 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.11
Total Particulate Matter (TSP)	--	0.11
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	9.7E-03
Cobalt	--	2.6E-04
Copper	--	2.2E-03
Manganese	--	5.4E-04
Nickel	--	0.04
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions were estimated by using stack test data from the other plasma torch in primary mill.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

6.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1.]

6.1.4. In accordance with the permit application and its amendments, particulate emissions to the atmosphere from the stack (PM-20-S) venting the baghouse used to control plasma cutting torch (PM-20-P) shall not exceed 0.025 lb/hr. Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1165 and 45CSR§7-4.1.]

6.1.5. In accordance with the permit application and its amendments, plasma torch (PM-20-P) shall be operated no more than 2,820 hours per calendar year.
[45CSR13 - R13-1165]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

6.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

6.4.1. The permittee shall maintain monthly records of the operating hours of the plasma torch (PM-20-P) as required in Section 6.1.5.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-23-P	Emission unit name: PM Plate Anneal Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of one plate anneal furnace located in the primary mill department. The furnace is natural gas fired and vents combustion emissions to indoor air (no stack). The furnace is used for the annealing of alloy products.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 09/07/1993	Installation date: 09/07/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 Tons/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/5
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 24,762 SCFH	Type and Btu/hr rating of burners: 26,000,000 Btu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1,050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	13,015
Carbon Monoxide (CO)	--	9.1
Nitrogen Oxides (NO _x)	--	17.0
Lead (Pb)	--	5.4E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.82
Total Particulate Matter (TSP)	--	0.82
Sulfur Dioxide (SO ₂)	--	0.07
Volatile Organic Compounds (VOC)	--	0.60
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.6E-06
3-Methylchloranthrene	--	2.0E-07
7,12-Dimethylbenz(a)anthracene	--	1.7E-06
Acenaphthene	--	2.0E-07
Acenaphthylene	--	2.0E-07
Anthracene	--	2.6E-06
Benzene	--	2.3E-04
Benzo(a)anthracene	--	2.0E-07
Benzo(a)pyrene	--	1.3E-07
Benzo(b)fluoranthene	--	2.0E-07
Benzo(g,h,i)perylene	--	1.3E-07
Benzo(k)fluoranthene	--	2.0E-07
Chrysene	--	2.0E-07
Dibenzo(a,h)anthracene	--	1.3E-07
Dichlorobenzene	--	1.3E-04
Fluoranthene	--	3.3E-07
Fluorene	--	3.0E-07
Formaldehyde	--	8.1E-03
Hexane	--	0.20
Indenol(1,2,3,c,d)pyrene	--	2.0E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	6.6E-05
Pyrene	--	5.4E-07
Toluene	--	3.7E-04
Arsenic	--	2.2E-05
Beryllium	--	1.3E-06
Cadmium	--	1.2E-04
Chromium	--	1.5E-04
Cobalt	--	9.1E-06
Manganese	--	4.1E-05
Mercury	--	2.8E-05
Nickel	--	2.3E-04
Selenium	--	2.6E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

5.1.7. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) as operated shall fire only natural gas and shall not be operated in a manner to exceed a maximum design heat input of 26.0×10^6 Btu/hr.
[45CSR13 - R13-1767]

5.1.8. In accordance with the permit application and its amendments, emissions to the atmosphere from the roof vent of the plate anneal furnace (PM-23-P) shall not exceed the following utilizing natural gas:

- Particulates 0.075 lb/hr
- Sulfur Dioxide 0.015 lb/hr
- Nitrogen Oxide 2.5 lb/hr
- Carbon Monoxide 0.875 lb/hr
- Total Hydrocarbons 0.07 lb/hr

Compliance with the PM limit demonstrates compliance with the PM emission limit from 45CSR§7-4.1.
[45CSR13 - R13-1767 and 45CSR§7-4.1. (PM-23-P)]

5.1.9. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall consume no more than 25,000 ft³/hr of natural gas.
[45CSR13 - R13-1767]

5.1.10. In accordance with the permit application and its amendments, the plate anneal furnace (PM-23-P) shall not process more than 12,000 lb/hr of alloy plate.
[45CSR13 - R13-1767]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

5.4.2. For purposes of tracking compliance of the Plate anneal furnace (PM-23-P) with requirements of Sections 5.1.8. and Section 5.1.9. of this permit, monthly reports shall be filed per Appendix A of Permit R13-1767. These reports shall be filed within fifteen (15) days following the end of each month and shall record monthly and year-to-date amounts of natural gas consumed and NOx emissions in tons. Such records shall be certified by the permittee or responsible official of the company to be true and accurate.
[45CSR13 - R13-1767 and 45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the *Schedule of Compliance Form* as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-25-P	Emission unit name: Southcentral Grinder	List any control devices associated with this emission unit: Baghouse PM-6 & 25-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Midwest	Model number:	Serial number:
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Construction date: 1966	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Southcentral Grinder	PM-25-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-26-P	Emission unit name: Northcentral Grinder	List any control devices associated with this emission unit: Baghouse PM-26-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Primary Mill Plate Building, used to surface grind cracks on large alloys ingots.

Manufacturer: Beardsley piper9	Model number:	Serial number:
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Construction date: 1980	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4 tons/hr

Maximum Hourly Throughput: 4 tons/hr	Maximum Annual Throughput: 35,040 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.02
Copper	--	0.05
Manganese	--	0.01
Nickel	--	0.99
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Northcentral Grinder	PM-26-P	2.99

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PM-28-P PM-29-P	Emission unit name: PM Forge Furnace F-101 PM Forge Furnace F-102	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This emission unit consists of two ingot heating (forging) furnaces located within the primary mill department. The furnaces are natural gas fired and vent products of combustion emissions to outside air. The furnaces are used for the heating of alloy ingots to forging temperatures prior to actual forging operations.

Manufacturer: Salem Furnace Company	Model number:	Serial number:
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Construction date: 01/01/1998	Installation date: 04/01/1998	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 6.5 tons/hr each

Maximum Hourly Throughput: 6.5 tons/hr each	Maximum Annual Throughput: 56,940 tons/yr each	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 14,286 SCFH	Type and Btu/hr rating of burners: 15,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	7,509
Carbon Monoxide (CO)	--	5.3
Nitrogen Oxides (NO _x)	--	3.1
Lead (Pb)	--	3.1E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.48
Total Particulate Matter (TSP)	--	0.48
Sulfur Dioxide (SO ₂)	--	0.04
Volatile Organic Compounds (VOC)	--	0.34
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	1.5E-06
3-Methylchloranthrene	--	1.1E-07
7,12-Dimethylbenz(a)anthracene	--	1.0E-06
Acenaphthene	--	1.1E-07
Acenaphthylene	--	1.1E-07
Anthracene	--	1.5E-07
Benzene	--	1.3E-04
Benzo(a)anthracene	--	1.1E-07
Benzo(a)pyrene	--	7.5E-08
Benzo(b)fluoranthene	--	1.1E-07
Benzo(g,h,i)perylene	--	7.5E-08
Benzo(k)fluoranthene	--	1.1E-07
Chrysene	--	1.1E-07
Dibenzo(a,h)anthracene	--	7.5E-08
Dichlorobenzene	--	7.5E-05
Fluoranthene	--	1.9E-07
Fluorene	--	1.8E-07
Formaldehyde	--	4.7E-03
Hexane	--	0.11
Indenol(1,2,3,c,d)pyrene	--	1.1E-07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	3.8E-05
Pyrene	--	3.1E-07
Toluene	--	2.1E-04
Arsenic	--	1.3E-05
Beryllium	--	7.5E-07
Cadmium	--	6.9E-05
Chromium	--	8.8E-05
Cobalt	--	5.3E-06
Manganese	--	2.4E-05
Mercury	--	1.6E-05
Nickel	--	1.3E-04
Selenium	--	1.5E-06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45C SR§10-4.1.]

5.1.11. In accordance with the permit application and its amendments, the maximum emissions to the air from the two Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) are not to exceed the following hourly and annual emission rates:

Pollutant	Maximum Emission Rate for Each Furnace		Maximum Emission Rate for Two Furnaces	
	(lb/hr)	(tons/yr) ⁽²⁾	(lb/hr)	(tons/yr)
CO	2.74	9.60	5.48	19.2
NO _x	1.88	5.26	3.76	10.52
PM ₁₀	1.26	4.24	2.52	8.48
SO ₂	0.225	0.79	0.45	1.58
VOC's	0.1 ⁽¹⁾	0.35	0.2	0.7

Note: (1) Hourly emission rate based on heating value of natural gas (1,100 Btu/ft³)

(2) Annual emissions are based on an operating schedule of 8,760 hours per year.

[45CSR13 - R13-2163, and 45CSR§7-4.1.]

5.1.12. In accordance with the permit application and its amendments, the permitted facility shall utilize natural gas as the only fuel for Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P). The consumption rate of natural gas is not to exceed 13,636 ft³/hr, or a rolling yearly total of 119.5 MM ft³/yr.
[45CSR13 - R13-2163]

5.1.13. In accordance with the permit application and its amendments, the total maximum heat input for each of the two Forge furnaces F-101 and F102 (PM-28-P and PM-29-P) shall not exceed 15 million Btu/hr (each of the fifteen (15) low NO_x burners for each furnace not to exceed 1.25 MM Btu/hr heat input).
[45CSR13 - R13-2163]

5.1.14. In accordance with the permit application and its amendments, sulfur content of natural gas used for fuel in the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) is not to exceed 5 parts per million (less than ½ a grain per cubic foot of natural gas).
[45CSR13 - R13-2163]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.

[45CSR§30-12.7.]

5.4.3. For the purpose of determining compliance of the Forge furnaces F-101 and F-102 (PM-28-P and PM-29-P) with the requirements of Sections 5.1.12., 5.1.13., and 5.1.14 of this permit, the facility shall maintain monthly records using the provided sample recordkeeping forms appended to Permit R13-2163 as Attachments A and B. These records shall document monthly and rolling yearly total of natural gas consumed, hours of operation, hourly natural gas consumption rate in units of SCF/hr, and sulfur content of the natural gas in ppm. All records shall be initialed by a "Responsible Official" within fifteen (15) days after the end of the calendar month using the space provided on the record forms, and then signed by a "Responsible Official" within thirty (30) days after the end of the calendar year utilizing the Certification of Data Accuracy statement which is to be copied to the reverse side of each reporting form. This information shall be maintained on-site for a period of no less than five (5) calendar years from the date of the last entry on the form, and be made available to the Director his duly authorized representative upon request. The permittee may propose to the Director a different form of record keeping from that described.

[45CSR13-R13-2163]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form as **ATTACHMENT F**.**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SC-1-P	Emission unit name: Service Center Wood Saws	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Construction of boxes and wood crates to ship our products to customers.

Manufacturer: Inco	Model number:	Serial number:
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Construction date: <1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 Ton

Maximum Hourly Throughput: 0.5 Ton	Maximum Annual Throughput: 9,490 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.05
Total Particulate Matter (TSP)	--	0.05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Mass Balance		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wood Saws	SC-1-P	1

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SC-2-P	Emission unit name: Service Center Finish Saw	List any control devices associated with this emission unit: SC-2-C Wet Mist Scrubber
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Service Center, used to finish cut alloy material.

Manufacturer: Savage	Model number:	Serial number:
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Construction date: 1970	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.5 Tons/hr

Maximum Hourly Throughput: 0.5 Tons/hr	Maximum Annual Throughput: 4,380 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	4.1
Total Particulate Matter (TSP)	--	4.1
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.41
Cobalt	--	0.10
Copper	--	0.20
Manganese	--	0.02
Nickel	--	1.9
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

8.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
Wood Saws	SC-2-P	1

[45CSR§7-4.1.]

8.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

8.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-1-P	Emission unit name: CAP Line Pickling	List any control devices associated with this emission unit: SM-1-C Mist Eliminator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Continuous Anneal & Pickle (CAP) Line is a series of furnaces and pickling tanks to continuously anneal and pickle long coils of strip end to end.

Manufacturer: INCO	Model number:	Serial number:
Construction date: 1966	Installation date: 1958	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 Tons per hour

Maximum Hourly Throughput: 6 Tons	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	1.4
Total Particulate Matter (TSP)	--	1.4
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid (HCl)	--	0.22
Nitric Acid (HNO ₃)	--	0.66
Hydrofluoric Acid (HF)	--	0.55
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1]

9.1.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Maximum Allowable Emission Limit
Sulfuric Acid	70 mg/dscm
Nitric Acid	140 mg/dscm
Hydrochloric Acid	420 mg/dscm

[45CSR§7-4.2.]

9.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a. through 4.1.e. of 45CSR10.

[45CSR§10-4.1.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

9.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

9.2.2. The Pickling Tanks shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The permittee shall perform preventative maintenance in accordance with the manufacturer's recommendations and specifications.

[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-2-P	Emission unit name: CAP Shot Blaster	List any control devices associated with this emission unit: Wet Scrub SM-2-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

This unit is located on the CAP line in the Sheet and Strip Mill. The shot blaster is used to remove oxide from alloy sheet.

Manufacturer: Pangborn	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	1.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel (Ni)	--	0.14
Copper (Cu)	--	0.01
Chromium (Cr)	--	0.07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Used Shot Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
CAP Shot Blaster	SM-2-P	9.15

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-3-P	Emission unit name: MKW Mill	List any control devices associated with this emission unit: Mist Eliminator SM-3-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Sheet and Strip Mill, used to cold roll alloy strip to smaller gauge.

Manufacturer: Schloeman	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3.8 tons/hr

Maximum Hourly Throughput: 3.8 tons/hr	Maximum Annual Throughput: 33,288 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	--	3.50
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel (Ni)		
Copper (Cu)		
Chromium (Cr)		
Manganese (Mn)		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42 Emissions Chemistry		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.1. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Equipment	Unit ID	Maximum Allowable PM Emission Limit (lb/hr)
MKW Rolling Mill	SM-3-P	6.68

[45CSR§7-4.1., 45CSR13 - R13-2163]

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.

[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-5-P	Emission unit name: CAP Line Salt Bath	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Surface treatment to remove oxides from products.

Manufacturer: Kolene	Model number:	Serial number:
Construction date: 1969	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
20 tons/hr

Maximum Hourly Throughput: 20 tons/hr	Maximum Annual Throughput: 175,200 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,571 SCFH	Type and Btu/hr rating of burners: 6,900,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	789	3,454
Carbon Monoxide (CO)	--	2.4
Nitrogen Oxides (NO _x)	--	1.4
Lead (Pb)	--	1.4E-05
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.22
Total Particulate Matter (TSP)	--	0.22
Sulfur Dioxide (SO ₂)	--	0.02
Volatile Organic Compounds (VOC)	--	0.16
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	6.9E-07
3-Methylchloranthrene	--	5.2E-08
7,12-Dimethylbenz(a)anthracene	--	4.6E-07
Acenaphthene	--	5.2E-08
Acenaphthylene	--	5.2E-08
Anthracene	--	6.9E-08
Benzene	--	6.0E-05
Benzo(a)anthracene	--	5.2E-08
Benzo(a)pyrene	--	3.5E-08
Benzo(b)fluoranthene	--	5.2E-08
Benzo(g,h,i)perylene	--	3.5E-08
Benzo(k)fluoranthene	--	5.2E-08
Chrysene	--	5.2E-08
Dibenzo(a,h)anthracene	--	3.5E-08
Dichlorobenzene	--	3.5E-05
Fluoranthene	--	8.6E-08
Fluorene	--	8.1E-08
Formaldehyde	--	2.2E-03
Hexane	--	0.05
Indenol(1,2,3,c,d)pyrene	--	5.2E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.8E-05
Phenanthrene	--	4.9E-07
Pyrene	--	1.4E-07
Toluene	--	9.8E-05
Arsenic	--	5.8E-06
Beryllium	--	3.5E-07
Cadmium	--	3.2E-05
Chromium	--	4.0E-05
Cobalt	--	2.4E-06
Manganese	--	1.1E-05
Mercury	--	7.5E-06
Nickel	--	6.0E-05
Selenium	--	6.9E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1.]

4.1.7. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [45CSR§10-11.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

4.2.1. The Main boiler, V.I.M. boiler, CAP Salt Bath and West Pickle Salt Bath shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit. [45CSR§30-12.7.]

4.2.2. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day. [45CSR§10-3.8.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-6-P	Emission unit name: CAP Preheat Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The furnace is located in the Strip Mill Department on the CAP Line and is used in the preheating process of sheet products. The emissions are vented to indoor air.

Manufacturer: Drever	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 19,048 SCFH	Type and Btu/hr rating of burners: 20,000,000 each
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-7-P	Emission unit name: CAP Equalize Furnace	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

The furnace is located in the Strip Mill Department on the CAP Line and is used in the process of sheet products. The emissions are vented to indoor air.

Manufacturer: Drever	Model number:	Serial number:
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Construction date: 1967	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 tons/hr

Maximum Hourly Throughput: 6 tons/hr	Maximum Annual Throughput: 52,560 tons/yr	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 15,714 SCFH	Type and Btu/hr rating of burners: 16,500,000
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 – R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SM-10-P	Emission unit name: # 2 CBU Grinder	List any control devices associated with this emission unit: SM-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to surface grind alloy strip.

Manufacturer: Hillacme	Model number:	Serial number:
Construction date: 1967	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2 tons/hr

Maximum Hourly Throughput: 2 tons/hr	Maximum Annual Throughput: 17,520 Tons	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	1.3E-03
Cobalt	--	4.5E-05
Copper	--	6.9E-05
Manganese	--	2.7E-05
Nickel	--	3.7E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42
Emissions Chemistry

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

7.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1., 45CSR13 - R13-2163]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

7.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after two weeks, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-1-P	Emission unit name: Tumble Blaster	List any control devices associated with this emission unit: TP-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer: OMSG Shotblaster	Model number: Type SG10 H2 Metal Slat Tumblasts	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 119,912 lbs/yr (lbs of steel shot purchased)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.02
Total Particulate Matter (TSP)	--	0.02
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Tumble Blaster 1 (TP-1P)	0.13	0.59

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Tumble Blaster 1	Pounds of Shot Used	200 pounds per day

[45CSR13 - Permit R13-2532]

13.1.4 Particulate Matter emissions from the Tumble Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Tumble Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

13.1.8. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10-C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532 and 45CSR§13-5.11.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.2. For Baghouse TP-10-C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.

[45CSR§30-5.1.c.]

13.3.3. Record of Maintenance of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

13.3.4. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- a. The amount of shot used in the tumble blaster and cabinet blaster.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-2-P	Emission unit name: Plasma Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the size of large scrap, the plasma cutter cuts the material into smaller pieces.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Cut metal scrap: 5,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes ___X___ No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.20
Total Particulate Matter (TSP)	--	2.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Nickel	--	1.30
Chromium	--	0.57
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Based on testing at Huntington Revert facility measuring net mass lost during plasma cutting. HAPs based on annual average HAP contained in metal processed, as determined from 2008 TRI data.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532]

14.1.2. Emission Point (TP-2-S) - Plasma Cutter PM Emissions. The emission point (TP-2-S) associated with the Plasma Cutter (TP-2-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.50	1.75
Hazardous Air Pollutants (HAP)	0.43	1.49

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-2-P	Plasma Cutter	5,000	21,900

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532, Condition 5.1.24.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-3-P	Emission unit name: Plasma Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer: Thermal Dynamics	Model number: PAK 45 Plasma Cutter	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.20
Total Particulate Matter (TSP)	--	2.20
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.57
Nickel	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Plasma Cutter (TP-3P)	0.5	2.19

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Plasma Cutter	Pounds Cut	18,000 pounds per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- b. The pounds of material cut by the plasma cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-4-P	Emission unit name: Arc Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
Construction date: 2002	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 13,693 #rods/yr (Number of rods used)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.38
Total Particulate Matter (TSP)	--	0.38
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 1 (TP-4P)	0.05	0.21

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	960 per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-5-P	Emission unit name: Arc Cutter	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable).

Arc welding unit.

Manufacturer:	Model number:	Serial number:
Construction date: 2006	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 13,693 #rods/yr (Number of rods used)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit TP-4-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit TP-4-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 2 (TP-5P)	0.05	0.21

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	960 per day

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air form any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-6-P	Emission unit name: Cabinet Blaster	List any control devices associated with this emission unit: TP-10-C
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Manufacturer:	Model number:	Serial number:
2002		
Construction date:	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
35,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput: 69,180 lbs/yr (lbs of abrasive product purchased)	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Cabinet Blaster (TP-6P)	0.01	0.03

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Cabinet Blasting	Pounds of Shot Used	200 pounds per day

[45CSR13 - Permit R13-2532]

13.1.3 Particulate Matter emissions from the Cabinet Blaster shall be controlled by the use of a baghouse. Said baghouse shall be designed, installed, maintained and operated in such a manner so as to reduce PM emissions from the Cabinet Blaster by at least 99.99%.

[45CSR13 - Permit R13-2532]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532 and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532 and 45 CSR §7-5.1.]

13.1.8. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate Baghouse TP-10-C, and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532 and 45CSR§13-5.11.]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
a. The date, place as defined in this permit and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.
[45CSR13 - Permit R13-2532]

13.3.2. For Baghouse TP-10-C, the permittee shall visually inspect the filter cartridges through the inspection doors. The permittee shall monitor the differential pressure controller and ensure that the pressure drop is maintained below 5.0 PSI.
[45CSR§30-5.1.c.]

13.3.3. Record of Maintenance of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

13.3.4. Record of Malfunctions of Air Pollution Control Equipment. For Baghouse TP-10C, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.
For each such case associated with an equipment malfunction, the additional information shall also be recorded:
e. The cause of the malfunction.
f. Steps taken to correct the malfunction.
g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
[45CSR13 - Permit R13-2532]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:
a. The amount of shot used in the tumble blaster and cabinet blaster.
[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-7A-P	Emission unit name: Rotary Borings Kiln 1	List any control devices associated with this emission unit: TP-7A-1C, Cyclone TP-7A-2C, Thermal Oxidizer TP-7A-3C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary burn-off kiln heats the scrap metal to vaporize any oils and water present. The clean and dry scrap metal will exit from one end of the rotary kiln while the hot exhaust gases containing vaporized oils and water will exit the kiln at the other end. After exiting the kiln, these exhaust gases will be heated to above 600 °F in a smoke hood in order to prevent condensation of volatilized oils in the ducting system. The smoke hood will provide direct heat to the exhaust stream via a 0.75 MMBtu/hr natural gas burner.

Manufacturer: EnviroAir Inc. (CORECO)	Model number: Model BD-60	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Dirty scrap metal: 8,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: Smoke Hood at 0.75 MMBtu/hr	Type and Btu/hr rating of burners: Smoke Hood: one burner rated at 0.75 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,417
Carbon Monoxide (CO)	--	0.99
Nitrogen Oxides (NO _x)	--	1.20
Lead (Pb)	--	5.9E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)	--	7.1E-03
Volatile Organic Compounds (VOC)	--	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.8E-07
3-Methylchloranthrene	--	2.1E-08
7,12-Dimethylbenz(a)anthracene	--	1.9E-07
Acenaphthene	--	2.1E-08
Acenaphthylene	--	2.1E-08
Anthracene	--	2.8E-08
Benzene	--	2.5E-05
Benzo(a)anthracene	--	2.1E-08
Benzo(a)pyrene	--	1.4E-08
Benzo(b)fluoranthene	--	2.1E-08
Benzo(g,h,i)perylene	--	1.4E-08
Benzo(k)fluoranthene	--	2.1E-08
Chrysene	--	2.1E-08
Dibenzo(a,h)anthracene	--	1.4E-08
Dichlorobenzene	--	1.4E-05
Fluoranthene	--	3.5E-08
Fluorene	--	3.3E-08
Formaldehyde	--	8.9E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	2.1E-08
Naphthalene	--	7.2E-06
Phenanthrene	--	2.0E-07
Pyrene	--	5.9E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	--	4.0E-05
Arsenic	--	2.4E-06
Beryllium	--	1.4E-07
Cadmium	--	1.3E-05
Chromium	--	1.7E-05
Cobalt	--	9.9E-07
Manganese	--	4.5E-06
Mercury	--	3.1E-06
Nickel	--	2.5E-05
Selenium	--	2.8E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-7A-1C	Cyclone	Kiln 1 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and baghouse to be online when Kiln 1 is in operation
TP-7A-2C	Thermal		VOC	99	
TP-7A-3C	Baghouse		PM	99	

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-7A-P	Kiln 1	8,000	35,040

[45CSR13 - Permit R13-2532]

14.1.13. Emission Points TP-7A-P — Kiln 1 Exhaust Controls. The Cyclone (TP-7A-1C), Thermal Oxidizer (TP-7A2C), and Baghouse (TP-7A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 1 (Emission Unit TP-7A-P).

[45CSR13 - Permit R13-2532]

14.1.15. Emission Points TP-7A-P and TP-8A-P — Kiln Exhaust Emissions. Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Max. Pollutant Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.80	2.46
Nitrogen Oxides (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic	0.80	3.55

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532, Condition 5.1.20.]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a. through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

- a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.
- b. Each kiln system will be programmed to automatically shutdown when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.
- c. The temperature will be measured continuously.
- d. The temperature shall be continuously recorded electronically.
- e. The temperature readings shall be checked daily to confirm status of monitoring.
- f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.
- g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.4. Commencement of operation. The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.

[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. Proper Maintenance — At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. Continued Operation — Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. Documentation of Need for Improved Monitoring — After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. Excursions — an excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

14.2.10. Quality Improvement Plan (QIP) — Based on the results of a determination made under 40 CFR §64.7(d)(2) (permit condition 14.2.9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented.

[40 CFR § 64.8; 45CSR§30-5.1.c.]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

14.5.2. General reporting requirements for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-7B-P	Emission unit name: Rotary Kiln 1 Burners	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary kiln will be indirectly heated by four 0.5 MMBtu/hr natural gas burners. The burners associated with each kiln will have their own exhaust stack to atmosphere, separate from the exhaust from the kilns themselves.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.0 MMBtu/hr	Type and Btu/hr rating of burners: 4 Burners at 0.5 MMBtu/hr each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,031
Carbon Monoxide (CO)	--	0.72
Nitrogen Oxides (NO _x)	--	0.86
Lead (Pb)	--	4.3E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.07
Total Particulate Matter (TSP)	--	0.07
Sulfur Dioxide (SO ₂)	--	5.2E-03
Volatile Organic Compounds (VOC)	--	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	2.1E-07
3-Methylchloranthrene	--	1.5E-08
7,12-Dimethylbenz(a)anthracene	--	1.4E-07
Acenaphthene	--	1.5E-08
Acenaphthylene	--	1.5E-08
Anthracene	--	2.1E-08
Benzene	--	1.8E-05
Benzo(a)anthracene	--	1.5E-08
Benzo(a)pyrene	--	1.0E-08
Benzo(b)fluoranthene	--	1.5E-08
Benzo(g,h,i)perylene	--	1.0E-08
Benzo(k)fluoranthene	--	1.5E-08
Chrysene	--	1.5E-08
Dibenzo(a,h)anthracene	--	1.0E-08
Dichlorobenzene	--	1.0E-05
Fluoranthene	--	2.6E-08
Fluorene	--	2.4E-08
Formaldehyde	--	6.4E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	1.5E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	5.2E-06
Phenanthrene	--	1.5E-07
Pyrene	--	4.3E-08
Toluene	--	2.9E-05
Arsenic	--	1.7E-06
Beryllium	--	1.0E-07
Cadmium	--	9.4E-06
Chromium	--	1.2E-05
Cobalt	--	7.2E-07
Manganese	--	3.3E-06
Mercury	--	2.2E-06
Nickel	--	1.8E-05
Selenium	--	2.1E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burner Set (4 Burners/Set)	2.0

[45CSR13 - Permit R13-2532]

14.1.12. Emission Points TP-7B-P and TP-8B-P — Kiln Burners — NG Combustion Emissions. Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.20	0.86
Carbon Monoxide (CO)	0.17	0.72

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-8A-P	Emission unit name: Rotary Borings Kiln 2	List any control devices associated with this emission unit: TP-8A-1C, Cyclone TP-8A-2C, Thermal Oxidizer TP-8A-3C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary burn-off kiln heats the scrap metal to vaporize any oils and water present. The clean and dry scrap metal will exit from one end of the rotary kiln while the hot exhaust gases containing vaporized oils and water will exit the kiln at the other end. After exiting the kiln, these exhaust gases will be heated to above 600 °F in a smoke hood in order to prevent condensation of volatilized oils in the ducting system. The smoke hood will provide direct heat to the exhaust stream via a 0.75 MMBtu/hr natural gas burner.

Manufacturer: EnviroAir Inc. (CORECO)	Model number: Model BD-60	Serial number:
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Construction date: 2011	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Dirty scrap metal: 8,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: Smoke Hood at 0.75 MMBtu/hr	Type and Btu/hr rating of burners: Smoke Hood: one burner rated at 0.75 MMBtu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,417
Carbon Monoxide (CO)	--	0.99
Nitrogen Oxides (NO _x)	--	1.20
Lead (Pb)	--	5.9E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.09
Total Particulate Matter (TSP)	--	0.09
Sulfur Dioxide (SO ₂)	--	7.1E-03
Volatile Organic Compounds (VOC)	--	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.8E-07
3-Methylchloranthrene	--	2.1E-08
7,12-Dimethylbenz(a)anthracene	--	1.9E-07
Acenaphthene	--	2.1E-08
Acenaphthylene	--	2.1E-08
Anthracene	--	2.8E-08
Benzene	--	2.5E-05
Benzo(a)anthracene	--	2.1E-08
Benzo(a)pyrene	--	1.4E-08
Benzo(b)fluoranthene	--	2.1E-08
Benzo(g,h,i)perylene	--	1.4E-08
Benzo(k)fluoranthene	--	2.1E-08
Chrysene	--	2.1E-08
Dibenzo(a,h)anthracene	--	1.4E-08
Dichlorobenzene	--	1.4E-05
Fluoranthene	--	3.5E-08
Fluorene	--	3.3E-08
Formaldehyde	--	8.9E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	2.1E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	7.2E-06
Phenanthrene	--	2.0E-07
Pyrene	--	5.9E-08
Toluene	--	4.0E-05
Arsenic	--	2.4E-06
Beryllium	--	1.4E-07
Cadmium	--	1.3E-05
Chromium	--	1.7E-05
Cobalt	--	9.9E-07
Manganese	--	4.5E-06
Mercury	--	3.1E-06
Nickel	--	2.5E-05
Selenium	--	2.8E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-8A-1C	Cyclone	Kiln 2 Exhaust	PM	99	Cyclone, Thermal Oxidizer, and Baghouse to be online when Kiln 2 is in operation.
TP-8A-2C	Thermal		VOC	99	
TP-8A-3C	Baghouse		PM	99	

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-8A-P	Kiln 2	8,000	35,040

[45CSR13 - Permit R13-2532]

14.1.14. Emission Points TP-8A-P — Kiln 2 Exhaust Controls. The Cyclone (TP-8A-1C), Thermal Oxidizer (TP-8A-2C), and Baghouse (TP-8A-3C) shall be in good operating condition and online at all times during the operation of the Rotary Boring Kiln 2 (Emission Unit TP-8A-P).

[45CSR13 - Permit R13-2532]

14.1.15. Emission Points TP-7A-P and TP-8A-P — Kiln Exhaust Emissions. Each of the two (2) emission points (TP-7A-S and TP-8A-S) associated with two (2) Rotary Boring Kilns [Kiln #1 (TP-7A-P) and Kiln 2 (TP-8A-P)] shall not exceed the following maximum pollutant rates:

Pollutant	Max. Pollutant Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO ₂)	0.80	2.46
Nitrogen Oxides (NO _x)	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic	0.80	3.55

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532, Condition 5.1.20.]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

14.1.24. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance.

[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.1. In order to demonstrate compliance with the VOC emission limit in condition 14.1.15, the permittee shall do the following:

a. The temperature of each thermal oxidizer's chamber shall be monitored by a thermocouple. The sensor will be located in the oxidizer as an integral part of the oxidizer design.

b. Each kiln system will be programmed to automatically shutdown when the thermal oxidizer chamber is operating below 1,200 °F for 60 minutes or more.

c. The temperature will be measured continuously.

d. The temperature shall be continuously recorded electronically.

e. The temperature readings shall be checked daily to confirm status of monitoring.

f. Accuracy of the thermocouple shall be verified by a second probe inserted into the incinerator chamber with a handheld meter. This validation check will be conducted at least annually.

g. The accuracy of the thermocouple shall be ± 5 °C.

[40 CFR § 64.6(c); 45CSR§30-5.1.c.]

14.2.4. Commencement of operation. The permittee shall conduct the monitoring required under 40 CFR Part 64 upon issuance of this permit that includes such monitoring, or by the initial start-up date of the kilns (TP-7A-S and TP-8A-S) that requires such monitoring, whichever is later.
[40 CFR §§ 64.7(a) and 64.6(d); 45CSR§30-5.1.c.]

14.2.5. Proper Maintenance — At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR § 64.7(b); 45CSR§30-5.1.c.]

14.2.6. Continued Operation — Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR § 64.7(c); 45CSR§30-5.1.c.]

14.2.7. Documentation of Need for Improved Monitoring — After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR § 64.7(e); 45CSR§30-5.1.c.]

14.2.8. Excursions — an excursion is defined as any instance where the oxidizer temperature is below 1200°F for at least 60 minutes or any instance where the temperature falls below 1150 °F. An excursion can only occur when the processing unit (rotary borings kiln) is in operation
[40 CFR § 64.6(c)(2); 45CSR§30-5.1.c.]

14.2.9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR § 64.7(d); 45CSR§30-5.1.c.]

14.2.10. Quality Improvement Plan (QIP) — Based on the results of a determination made under 40 CFR §64.7(d)(2) (permit condition 14.2.9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 CFR §§ 64.8(b) through (e). Refer to permit condition 14.5.2.c for the reporting required when a QIP is implemented. [40 CFR § 64.8; 45CSR§30-5.1.c.]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed. [45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems. [45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.4.7. For the purpose of demonstrating compliance with Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of the times and duration of all excursions as defined in Condition 14.2.8.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.4.8. For the purpose of demonstrating compliance Conditions 14.1.15. and 14.2.1, the permittee shall maintain records of thermocouple validation checks conducted in accordance with Condition 14.2.1.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

14.5.2. General reporting requirements for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include the following information as applicable:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-8B-P	Emission unit name: Rotary Kiln 2 Burners	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the rotary kiln will be indirectly heated by four 0.5 MMBtu/hr natural gas burners. The burners associated with each kiln will have their own exhaust stack to atmosphere, separate from the exhaust from the kilns themselves.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
2.0 MM Btu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.0 MMBtu/hr	Type and Btu/hr rating of burners: 4 Burners at 0.5 MMBtu/hr each

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline natural gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	1,031
Carbon Monoxide (CO)	--	0.72
Nitrogen Oxides (NO _x)	--	0.86
Lead (Pb)	--	4.3E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.07
Total Particulate Matter (TSP)	--	0.07
Sulfur Dioxide (SO ₂)	--	5.2E-03
Volatile Organic Compounds (VOC)	--	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	2.1E-07
3-Methylchloranthrene	--	1.5E-08
7,12-Dimethylbenz(a)anthracene	--	1.4E-07
Acenaphthene	--	1.5E-08
Acenaphthylene	--	1.5E-08
Anthracene	--	2.1E-08
Benzene	--	1.8E-05
Benzo(a)anthracene	--	1.5E-08
Benzo(a)pyrene	--	1.0E-08
Benzo(b)fluoranthene	--	1.5E-08
Benzo(g,h,i)perylene	--	1.0E-08
Benzo(k)fluoranthene	--	1.5E-08
Chrysene	--	1.5E-08
Dibenzo(a,h)anthracene	--	1.0E-08
Dichlorobenzene	--	1.0E-05
Fluoranthene	--	2.6E-08
Fluorene	--	2.4E-08
Formaldehyde	--	6.4E-04
Hexane	--	0.02
Indenol(1,2,3,c,d)pyrene	--	1.5E-08

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	5.2E-06
Phenanthrene	--	1.5E-07
Pyrene	--	4.3E-08
Toluene	--	2.9E-05
Arsenic	--	1.7E-06
Beryllium	--	1.0E-07
Cadmium	--	9.4E-06
Chromium	--	1.2E-05
Cobalt	--	7.2E-07
Manganese	--	3.3E-06
Mercury	--	2.2E-06
Nickel	--	1.8E-05
Selenium	--	2.1E-07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burner Set (4 Burners/Set)	2.0

[45CSR13 - Permit R13-2532]

14.1.12. Emission Points TP-7B-P and TP-8B-P — Kiln Burners — NG Combustion Emissions. Each of the two (2) emission points (TP-7B-S and TP-8B-S) associated with the two (2) Rotary Kiln Burner Sets [TP-7B-P and TP-8B-P; four (4) burners per burner set; each burner set providing indirect heat to one kiln] shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.20	0.86
Carbon Monoxide (CO)	0.17	0.72

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-9-P	Emission unit name: Crusher	List any control devices associated with this emission unit: TP-9-C, Electrostatic Precipitator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, the metal will be reduced into chips by the crusher.

Manufacturer: American Pulverizer	Model number: 380-HD	Serial number: 8416
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Construction date: 2011	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Metal scrap: 7,040 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	2.30
Total Particulate Matter (TSP)	--	2.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	0.56
Nickel	--	1.30
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). AP-42		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-9-C	ESP	Scrap Metal Crusher	PM	88.3	ESP to be online when Crusher is in operation.

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-9-P	Scrap Metal Crusher	7,040	8,975

[45CSR13 - Permit R13-2532]

14.1.5. Emission Point (TP-9-S) – Crusher PM Controls. The ESP (Control Device TP-9-C) shall be online and good operating condition at all times during the operation of the scrap metal Crusher (Emission Unit TP-9-P).

[45CSR13 - Permit R13-2532, Condition 5.1.5.]

14.1.6. Emission Point (TP-9-S) – Crusher PM Emissions. The emission point (TP-9-S) associated with the Scrap Metal Crusher (Emission Unit TP-9-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	1.75	2.20
Hazardous Air Pollutants	1.49	1.90

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.2. The permittee shall visually inspect each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices for malfunction, leaks and effective operation every three (3) calendar months. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure particulate matter capture system integrity and effective operation. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-10-P	Emission unit name: Shot/Tumbler Blaster	List any control devices associated with this emission unit: TP-10-C, Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycle process, if needed, the scrap metal will be cleaned by the shot blaster which will remove any surface of oxides or surface impurities.

Manufacturer: Wheelabrator	Model number: GN34	Serial number:
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Construction date: 2015	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Metal Scrap: 15,000 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	--	0.05
Total Particulate Matter (TSP)	--	0.05
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	--	2.4E-03
Nickel	--	5.8E-03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Emission factor from data collected at another Special Metals facility.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emission Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-10-C	Baghouse	Shot Blaster	PM	99.9	Baghouse to be online when Shot Blaster is in operation.

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lb/hr)	(ton/yr)
TP-10-P	Shot/ Tumble Blaster	15,000	3,000

[45CSR13 - Permit R13-2532]

14.1.10. Emission Point TP-10-P – Shot Blaster PM Controls. The Baghouse (Control Device TP-10-C) shall be online and good operating condition at all times during the operation of the Shot Blaster (Emission Unit TP-10-P).

[45CSR13 - Permit R13-2532]

14.1.11. Emission Point TP-10-P – Shot Blast PM Emissions. Emission point (TP-10-S) associated with the Shot Blaster (Emission Unit TP-10-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants	0.04	0.01

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-11-P	Emission unit name: Wash Water Burner	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the quantity of dirt, oil, and grease introduced into the kilns along with the scrap metal, a raw material wash system cleans the metal. The wash water is heated before use by natural gas burners. This burner has a separate exhaust stack.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.83 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 0.83 MMBtu/hr	Type and Btu/hr rating of burners: Eclipse IJ-II high efficiency (>80%) nozzle mixing power burner (0.83 MMBtu/hr).
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	428
Carbon Monoxide (CO)	--	0.30
Nitrogen Oxides (NO _x)	--	0.36
Lead (Pb)	--	1.8E-06
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.03
Total Particulate Matter (TSP)	--	0.03
Sulfur Dioxide (SO ₂)	--	2.1E-03
Volatile Organic Compounds (VOC)	--	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnaphthalene	--	8.6E-08
3-Methylchloranthrene	--	6.4E-09
7,12-Dimethylbenz(a)anthracene	--	5.7E-08
Acenaphthene	--	6.4E-09
Acenaphthylene	--	6.4E-09
Anthracene	--	8.6E-09
Benzene	--	7.5E-06
Benzo(a)anthracene	--	6.4E-09
Benzo(a)pyrene	--	4.3E-09
Benzo(b)fluoranthene	--	6.4E-09
Benzo(g,h,i)perylene	--	4.3E-09
Benzo(k)fluoranthene	--	6.4E-09
Chrysene	--	6.4E-09
Dibenzo(a,h)anthracene	--	4.3E-09
Dichlorobenzene	--	4.3E-06
Fluoranthene	--	1.1E-08
Fluorene	--	1.0E-08
Formaldehyde	--	2.7E-04
Hexane	--	6.4E-03
Indenol(1,2,3,c,d)pyrene	--	6.4E-09

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	2.2E-06
Phenanthrene	--	6.1E-08
Pyrene	--	1.8E-08
Toluene	--	1.2E-05
Arsenic	--	7.1E-07
Beryllium	--	4.3E-08
Cadmium	--	3.9E-06
Chromium	--	5.0E-06
Cobalt	--	3.0E-07
Manganese	--	1.4E-06
Mercury	--	9.3E-07
Nickel	--	7.5E-06
Selenium	--	8.6E-08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-11-P	TP-11-S	Wash Water Burner	0.83

[45CSR13 - Permit R13-2532]

14.1.8. Emission Point (TP-11-S) - Water Wash Burner — NG Combustion Emissions. Emission point (TP-11-S) associated with the Water Wash Burner (Emission Unit TP-11-P) shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.09	0.36
Carbon Monoxide (CO)	0.07	0.30

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO2) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-12-P	Emission unit name: Rinse Water Burner	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

In the scrap metal recycling process, to reduce the quantity of dirt, oil, and grease introduced into the kilns along with the scrap metal, a raw material wash and rinse system cleans the metal. The rinse water is heated before use by natural gas burners. This burner has a separate exhaust stack.

Manufacturer:	Model number:	Serial number:
Construction date: 2011	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
0.44 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 0.44 MMBtu/hr	Type and Btu/hr rating of burners: Eclipse IJ-II high efficiency (>80%) nozzle mixing power burner (0.44 MMBtu/hr).
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)	--	227
Carbon Monoxide (CO)	--	0.16
Nitrogen Oxides (NO _x)	--	0.19
Lead (Pb)	--	9.4E-07
Particulate Matter (PM _{2.5})	--	--
Particulate Matter (PM ₁₀)	--	0.01
Total Particulate Matter (TSP)	--	0.01
Sulfur Dioxide (SO ₂)	--	1.1E-03
Volatile Organic Compounds (VOC)	--	0.01
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
2-Methylnapthalene	--	4.5E-08
3-Methylchloranthrene	--	3.4E-09
7,12-Dimethylbenz(a)anthracene	--	3.0E-08
Acenaphthene	--	3.4E-09
Acenaphthylene	--	3.4E-09
Anthracene	--	4.5E-09
Benzene	--	4.0E-06
Benzo(a)anthracene	--	3.4E-09
Benzo(a)pyrene	--	2.3E-09
Benzo(b)fluoranthene	--	3.4E-09
Benzo(g,h,i)perylene	--	2.3E-09
Benzo(k)fluoranthene	--	3.4E-09
Chrysene	--	3.4E-09
Dibenzo(a,h)anthracene	--	2.3E-09
Dichlorobenzene	--	2.3E-06
Fluoranthene	--	5.7E-09
Fluorene	--	5.3E-09
Formaldehyde	--	1.4E-04
Hexane	--	3.4E-03
Indenol(1,2,3,c,d)pyrene	--	3.4E-09

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Naphthalene	--	1.2E-06
Phenanthrene	--	3.2E-08
Pyrene	--	9.4E-09
Toluene	--	6.4E-06
Arsenic	--	3.8E-07
Beryllium	--	2.3E-08
Cadmium	--	2.1E-06
Chromium	--	2.6E-06
Cobalt	--	1.6E-07
Manganese	--	7.2E-07
Mercury	--	4.9E-07
Nickel	--	4.0E-06
Selenium	--	4.5E-08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.7. Maximum DHI Rates - NG Burner Equipment. The following burner equipment shall combust only natural gas and shall not exceed the maximum design heat input (DHI) rates given below:

Emission Unit ID	Emission Point ID	Equipment Piece	Maximum DHI Rate (MM Btu/hr)
TP-12-P	TP-12-S	Rinse Water Burner	0.44

[45CSR13 - Permit R13-2532]

14.1.9. Emission Point (TP-12-S) - Rinse Water Burner — NG Combustion Emissions. Emission point (TP-12-S) associated with the Rinse Wash Burner (Emission Unit TP-12-P) shall not exceed the following maximum emission rates:

Pollutant	Max. Emission Rate Per Emission Point	
	(lb/hr)	(ton/yr)
Nitrogen Oxides (NOx)	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

[45CSR13 - Permit R13-2532]

14.1.16. Fuel Burning Equipment Opacity Limit — NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.; 45CSR13 - Permit R13-2532]

14.1.17. Quarterly (every three months) opacity checks shall be performed per the test requirement given in Section 14.3.1. for the fuel burning equipment listed in 14.1.16. above.

[45CSR13 - Permit R13-2532]

14.1.18. Fuel Burning Unit Emission Rate Limitation — NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.

No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in millions B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units.

[45CSR§2-4.1.b]

[45CSR§2-4.1.; 45CSR13 - Permit R13-2532]

14.1.22. Sulfur Dioxide (SO₂) In-stack Concentration Limitation — Kiln 1 and Kiln 2 Exhausts.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a.through e.

[45CSR§10-4.1.; 45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

f. To demonstrate compliance with Section 14.1.7., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the maximum design heat input (DHI) rates of the burner equipment listed in Section 14.1.7., and any correspondence sent with regards to changing the DHI rates.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[45CSR13 - Permit R13-2532]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-13-P	Emission unit name: Arc Cutter 3	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2013	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 3 (TP-13-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-13-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-15-P	Emission unit name: Arc Cutter 4	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 4 (TP-15-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-15-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-16-P	Emission unit name: Arc Cutter 5	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arc welding unit.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 2015	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 lb/hr

Maximum Hourly Throughput: 15,000 lb/hr	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.03	0.13
Total Particulate Matter (TSP)	0.03	0.13
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates and emission factors for electrode type Eni-Cu from AP-42 Table 12.19-1 for shielded metal arc welding (SMAW) utilizing copper enriched nickel and rod weight provided by facility of 0.15 lb per rod.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

13.1.1. Emissions from these sources shall not exceed the following:

Source	PM	
	lb/hr	tpy
Arc Cutter 5 (TP-16-P)	0.03	0.13

Compliance with these limits shall demonstrate compliance with the less stringent requirements of 45CSR§7-4.1. [45CSR13 - Permit R13-2532, Conditions 4.1.1. and 4.1.7.; and 45CSR§7-4.1.]

13.1.2. The permittee shall operate the following units within the specified parameter limits:

Source	Parameter	Limit
Arc Cutting	Rods Used	3,360 per day (This represents the amount to be used for all arc cutters in total.)

[45CSR13 - Permit R13-2532, Condition 4.1.2.]

13.1.5 No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR13 - Permit R13-2532, Condition 4.1.6. and 45 CSR §7-3.1.]

13.1.6 No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR13 - Permit R13-2532, Condition 4.1.8 and 45 CSR §7-5.1.]

14.1.1. Scrap Metal Nickel and Chromium Content. The permittee shall notify the Director in writing of any change in Nickel and/or Chromium content in the scrap metal (content now set at 60% and 25% by weight, respectively) and shall quantify the effect of the change upon air emissions.

[45CSR13 - Permit R13-2532, Condition 5.1.1.]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate		Comments
		lb/hr	tpy	
TP-16-P	Arc Cutter	15,000	---	Air Pollutant Emission Rates Calculated Based on Hourly and Annual Scrap Metal Processing Rates

[45CSR13 – Permit R13-2532, Condition 5.1.4.]

14.1.18. Process Opacity Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, Kiln 2, Arc Cutter. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532, Condition 5.1.19.]

14.1.19. Process PM Emission Weight Limitation - Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2, Arc Cutter. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532, Condition 5.1.21.]

14.1.22. Emission Point (TP-13-S, TP-15-S, and TP-16-S) - Arc Cutter PM & HAP Emissions.

The emission point (TP-13-S, TP-15-S, and TP-16-S) associated with the Arc Cutter (TP-13-P, TP 15-P, and TP-16-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	lb/hr ⁽¹⁾	tpy ⁽²⁾
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

⁽¹⁾ Based on a welding rod usage rate of 3 lb/hr and an emission factor(s) for electrode type Eni-Cu.

⁽²⁾ Based on operating 8,760 hr/yr.

[45CSR13 - Permit R13-2532, Condition 5.1.26.]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

13.3.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - Permit R13-2532, Condition 4.3.1]

13.3.5. In order to determine compliance with the emissions limits of condition 13.1.1 of this permit and the usage limits of condition 13.1.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

- c. The number of rods used by the arc cutter.

[45CSR13 - Permit R13-2532, Condition 4.3.4]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.16. (10% opacity or less) and in Section 14.1.18. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.

[45CSR13 - Permit R13-2532, Conditions 5.1.17., 5.1.20., 5.3.1.]

14.4.1. Records, Operation and Compliance.

a. To demonstrate compliance with Sections 14.1.1. and 14.1.2., a person designated by a Responsible Official or Authorized Representative shall maintain a file documenting scrap metal nickel and chromium content, and the value of the hourly emission factor for the plasma cutter, and any correspondence sent with regards to changes in metal content and the hourly emission factor.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

g. To demonstrate compliance with Section 14.1.22. and 14.1.23., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation (for the arc cutter and arc slicer), electrode type and number of welding rods used.

h. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532, Condition 5.4.1.]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.

[45CSR13 - Permit R13-2532, Condition 5.4.2.]

14.4.6 Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.3.1. documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned.

The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - Permit R13-2532, Condition 5.4.5.]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.

[45CSR13 - Permit R13-2532, Condition 5.5.1.]

Are you in compliance with all applicable requirements for this emission unit? Yes No If

no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TP-19-P	Emission unit name: Viking Belt Blaster	List any control devices associated with this emission unit: TP-19-C Internal Baghouse
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
 In the scrap metal recycle process, if needed, the scrap metal will be cleaned by the belt blaster which will remove any surface of oxides or surface impurities.

Manufacturer: Viking	Model number: 600	Serial number:
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Construction date: 2015	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Metal Scrap: 600 lbs/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule:
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Dioxide (CO ₂)		
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)	0.05	0.19
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Chromium	0.01	0.0025
Nickel	0.024	0.006
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Air pollutant emission rates calculated based on hourly and annual scrap metal processing rates.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

14.1.3. Control Equipment Guaranteed Collection Efficiencies. The following control equipment shall be installed and shall have at least the guaranteed collection efficiency as listed below:

Control Device ID No.	Control Device	Emissions Source	Pollutant Controlled	% Guaranteed Collection Efficiency	Comments
TP-19-C	Internal Baghouse	Belt Blaster	PM	99.9	Baghouse to be online when Blaster in Operation

[45CSR13 - Permit R13-2532]

14.1.4. Scrap Metal Processing Rates. The following hourly and annual scrap metal processing rates shall not be exceeded:

Equipment Unit ID	Equipment Name/Type	Maximum Processing Rate	
		(lbs/hr)	(ton/yr)
TP-19-P	Viking Belt Blaster	600	109.5

[45CSR13 - Permit R13-2532]

14.1.10. Emission Point TP-19-P — Viking Belt Blaster PM Controls. The Baghouse (Control Device TP-19-C) shall be online and good operating condition at all times during the operation of the Belt Blaster (Emission Unit TP-19-P).

[45CSR13 - Permit R13-2532]

14.1.11. Emission Point TP-19-P — Belt Blaster PM Emissions. Emission point (TP-19-S) associated with the Viking Belt Blaster (Emission Unit TP-19-P) shall not exceed the following maximum emission rates:

Pollutant	Maximum Emission Rate	
	(lb/hr)	(ton/yr)
Particulate Matter	0.05	0.19
Hazardous Air Pollutants	0.04	0.01

[45CSR13 - Permit R13-2532]

14.1.19. Process Opacity Limitation — Plasma Cutter, Belt Blaster, Crusher, Shot Blaster, Kiln 1, and Kiln 2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7- 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1.; 45CSR13 - Permit R13-2532]

14.1.20. Quarterly (every three months) opacity checks shall be performed per the test requirements given in Section 14.3.1. for the process equipment listed in 14.1.19. above.

[45CSR13 - Permit R13-2532]

14.1.21. Process PM Emission Weight Limitation — Plasma Cutter, Belt Blaster, Crusher, Shot Blaster, Kiln 1, and Kiln 2.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A from 45CSR7.

[45CSR§7-4.1.; 45CSR13 - Permit R13-2532]

14.1.23. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2532]

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

14.2.3. The permittee shall visually inspect the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure once every thirty (30) calendar days of operation. The permittee shall perform preventive or corrective action as expeditiously as possible to ensure effective operation of baghouse cleaning system mechanism, interior cleaning equipment and filter fabric integrity. The permittee shall record the date of such inspections and document any baghouse cleaning system repair, filter fabric replacement, preventive or corrective action taken. Records of such inspection shall be maintained in accordance with Section 3.4.2. of this permit.
[45CSR13 - Permit R13-2532]

14.3.1. Opacity Testing. To demonstrate compliance with the opacity requirements in Section 14.1.17. (10% opacity or less) and in Section 14.1.20. (20% opacity or less), the permittee shall conduct quarterly (every 3 months) emission observations in accordance with Method 22 of 40 CFR 60, Appendix A. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the emission points have visible emissions using the procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the testing survey, the permittee shall conduct an opacity evaluation in accordance with 40 CFR 60, Appendix A, Method 9, within 24 hours. A 40 CFR 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the emission source(s) is/are operated at normal operating conditions with no visible emission being observed.
[45CSR13 - Permit R13-2532]

14.4.1. Records, Operation and Compliance.

b. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall maintain copies of vendor information detailing the guaranteed collection efficiencies of the control devices listed in Section 14.1.3.

c. To demonstrate compliance with Section 14.1.3., a person designated by a Responsible Official or Authorized Representative shall keep a record of all maintenance work performed on the control devices listed in Section 14.1.3.

d. To demonstrate compliance with Section 14.1.4., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and twelve-month-rolling totals of scrap metal processing rates for the equipment listed in Section 14.1.4.

e. To demonstrate compliance with Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14., a person designated by a Responsible Official or Authorized Representative shall maintain a record of hours of operation and time of operation of the control devices listed in Sections 14.1.5., 14.1.10., 14.1.13., and 14.1.14.

g. All records required by this permit shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13 - Permit R13-2532]

14.4.2. Equipment Maintenance Records. The permittee shall maintain maintenance records relating to failure and/or repair of process equipment covered in this permit. In the event of equipment or system failure, these records shall document the permittee's efforts to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 - Permit R13-2532]

14.4.3. Certification of Information. Any application form, report, or compliance certification required by this permit to be submitted to the Division of Air Quality and/or USEPA shall contain a certification by the responsible official that states that, based on information and beliefs formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[45CSR13 - Permit R13-2532]

14.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2532]

14.4.5. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2532, Condition 5.4.3.]

14.4.6. Opacity Records. The permittee shall maintain records of the monitoring data required in Sections 14.1.17. and 14.1.20., documenting the date and time of each visible emission check, the emission point or equipment /source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission source out of service during the normal quarterly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR13 - Permit R13-2532]

14.5.1. Upon observing visible emissions in excess of the opacity limitations, the permittee shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said opacity reading.
[45CSR13 - Permit R13-2532]

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VM-2-P	Emission unit name: VIM Mold Preheat	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Located in the Vacuum Induction Melting Department, used in the preheating process of rolls. Vents to inside air.

Manufacturer: Electric Furnace	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 5,714 SCFH	Type and Btu/hr rating of burners: 6,000,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 – R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VM-5-P	Emission unit name: Tundish Drying Oven	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used to preheat vessels prior to using with molten alloys.

Manufacturer: Electric Oven	Model number:	Serial number:
Construction date: 1984	Installation date:	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1.5 MMBtu/hr

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24/7/52
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 1,429 SCFH	Type and Btu/hr rating of burners: 1,500,000

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	5.0	0	1050

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Emissions for this source are included in emission unit PM-10A-P & PM-10B-P		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1 and 45CSR13 - R13-2163]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.
[45CSR§7-4.1. and 45CSR13 - R13-2163]

5.1.3. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1.]

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

5.2.1. The Furnaces listed above shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas as stated in Section 3.1.12. of this permit.
[45CSR§30-12.7.]

Are you in compliance with all applicable requirements for this emission unit? Yes ___No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

Attachment F
Schedule of Compliance

Schedule of Compliance

The facility is in compliance with all applicable requirements; therefore, a Schedule of Compliance Form is not provided.

Attachment G
Control Devices

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: BW-10-C	List all emission units associated with this control device. BW-10-P, Bar & Wire Mill Scholle Saw
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Manufacturer: Wheelabrator Corp.Uni-Wash, Inc.	Model number: 108-6P	Installation date: MM/DD/2005 Moved
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input checked="" type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & Metals		99.5 %

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

4300 CFM @ 11" SP; 1142 SQ. Ft. Cloth 81 Bags 6" X 108"; 285 Degree F Max. Temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Saw installed before 1970.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: BW-11-C	List all emission units associated with this control device. BW-11-P
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Manufacturer:	Model number:	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-17-C	List all emission units associated with this control device. CD-17-P, East Cutters (3 saws)
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Manufacturer:	Model number:	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-23-C	List all emission units associated with this control device. CD-23-P, CD West Cutters Baghouse
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Manufacturer: Floair	Model number:	Installation date: 1970
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM-Metals		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2919 CFM @ 12.5" S.P.; Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CD-23-P, CD West Cutters Baghouse, is exempt from 45CSR 7-4.1 and is not subject to an emission limit per WVDEP 2008 Fact Sheet.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-36-C	List all emission units associated with this control device. CD-36-P Cold Draw Hard Chrome Plating
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Manufacturer: Vanaire, Inc.	Model number: CH-7321 Chromax R	Installation date: 04/30/1993
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Metals Cr ⁺⁶	100%	

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The Vanaire Chromax chrome removal scrubber is engineered specifically to meet the California emission standard for chrome of 0.006 mg/amp-hr.
 Average flow rate 5940 ft³/min; Maximum flow rate 6279 ft³/min; Average pressure drop 3 inches.
 Scrubbing agent water, continuous make-up to reduce saturation.
 The hard chrome plating process at our facility is a "small" hard chrome plating process according to EPA standards. Our maximum potential cumulative rectifier capacity of 5,880,000 amp-hrs/yr. is far below the 60,000,000 amp-hrs/yr small source cutoff.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**
 If No, **Provide justification.** CD-36-P, Cold Draw Hard Chrome Plating, is subject to 40 C.F.R. Part 63, Subpart N, Chromium Electroplating MACT. This rule was proposed on 12/16/1993. Per 40 CFR 64.2(b)(i), CAM does not apply to emission limits proposed by EPA after 11/15/1990 pursuant to Clean Air Act Section 112 (MACT).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop across the composite mesh-pad system is monitored and recorded each day the process is operating.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-38-C	List all emission units associated with this control device. CD-38-P, Fugitive Ammonia Fumes from West Pickle Tank #11
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Manufacturer: HEIL® Process Equipment	Model number: 7311-SP	Installation date: MM/DD/2001
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Ammonium Sulfate (NH ₄) ₂ SO ₄	95%	98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow Rate 50,000 cfm; Average pressure drop 3 inches; Packing Size 3.5 inches' Packing Depth 10 feet; Scrubber Solution pH 2.0 SU Sulfuric Acid; Solution circulation rate 600 gpm;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** West Pickle Tank was installed in 1958.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CD-40-C	List all emission units associated with this control device. CD-40-P, Centro-Metalcut Type CAC 1220 Abrasive Saw
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Manufacturer: Agent Manufacturing	Model number: FT88-D1 (baghouse) 80SN70-D2 (cyclone)	Installation date: MM/DD/2010
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Cyclone: 28" length, 36" diameter, 6,000 acfm max at 68°F and 14.7 psia

Baghouse: mechanical shaker, 88 bags (5" diameter x 7.5' length), 842 ft² total cloth area, 5.93:1 air to cloth ratio, 5,000 acfm max at 68°F and 14.7 psia

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

Visually inspect control device every 3 months.

Visually inspect baghouse exterior and interior bags for leaks or failure every 30 calendar days.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-1-C	List all emission units associated with this control device. CS-1-P, Schluter Grinder
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Manufacturer: W. W.Sly	Model number: 51-360	Installation date: MM/DD/1964
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-2-C	List all emission units associated with this control device. CS-2-P, Norton Grinder
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Manufacturer: W. W.Sly	Model number: 51-360	Installation date: MM/DD/1964
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-3-C	List all emission units associated with this control device. CS-3-P, #1 Centro-Maskin Grinder
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Manufacturer: W. W. Sly	Model number: 51-360	Installation date: MM/DD/1966
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CS-4-C	List all emission units associated with this control device. CS-4-P, #2 Centro-Maskin Grinder
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Manufacturer: W. W. Sly	Model number: 51-360	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,212 cfm; Shaker Cleaning; 186 bags, 3,360 sq. ft. cloth area; air-to-cloth 3.9; ambient temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-1-C1	List all emission units associated with this control device. MS-1D, #4 EAF MS-1B, #5 EAF MS-1A, AOD Reactor MS-1E-P, Wire Feeder
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Manufacturer: Wheelabrator	Model number: 366	Installation date: MM/DD/1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

175,000 cfm; 6" W.C. pressure drop; Reverse Air Cleaning; 864 bags, 11.5" dia. x 30.5 ft. lg.; 79,488 sq. ft. cloth area; air-to-cloth 2.2; 180 deg. F max. temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-1-C2	List all emission units associated with this control device. MS-1D, #4 EAF MS-1B, #5 EAF MS-1A, AOD Reactor MS-1E-P, Wire Feeder
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Manufacturer: Wheelabrator	Model number: 168 Jet III	Installation date: MM/DD/1999
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99.7%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

350,000 cfm; 8" W.C. pressure drop; Pulse Jet Cleaning; 4,104 bags, 6" dia. x 14 ft. lg.; 93,648 sq. ft. cloth area; air-to-cloth 3.75; 180 deg. F temp.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-2-C	List all emission units associated with this control device. MS-2, Powder Torch
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Manufacturer: Wheelabrator Canada Inc.	Model number: 168 TA-SB, Series 6P	Installation date: MM /DD/1997
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Metal Oxide Fume		1.0 gr/dscf emissions

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow rate 70,000 ACFM; 765 bags; 6" dia. x 168" long; 215°F Max Temp; 4.01 Air to Cloth Ratio

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop measured and recorded continuously.
 Pressure gauge calibrated quarterly.
 Pressure taps checked daily for plugging.
 Weekly inspection according to P/M checklist by qualified personnel; maintenance performed as needed.
 Inspection/maintenance records maintained.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MS-9-C	List all emission units associated with this control device. MS-9-P, Lime Storage Silo
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Manufacturer: Carborundum	Model number: 300 CN 2	Installation date: MM/DD/1975
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

1,200 cfm rated ; Shaker Cleaning; 300 sq. ft. cloth area; air-to-cloth 4; ambient temp.; physical size 4 ft x 4 ft x 6 ft ht.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-4-C	List all emission units associated with this control device. PM-4-P, PMD Grit Blaster Machine
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Manufacturer: Pangbourne	Model number: 126 D	Installation date: 1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM-Metals		95.5%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

5880 CFM @ 6" S.P.; 168 Bags x 5" Dia x 126"; Ambient Air

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Pre-controlled potential PM emissions are less than 100 tons per year.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-5-C	List all emission units associated with this control device. PM-5-P, Southeast Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
PM-6-C & PM-25-C

List all emission units associated with this control device.
PM-25-P, Southcentral Grinder
PM-6-P, Southwest grinder

Manufacturer:
Pangborn Corp.

Model number:
C150

Installation date:
MM/DD/1967

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-7-C	List all emission units associated with this control device. PM-7-P, Northeast Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft²; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-8A-C	List all emission units associated with this control device. PM-8-P, North-West Grinder
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Manufacturer: Mikropul	Model number: 144-12-20 TRMC	Installation date: 08/01/2008
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM (Nickel alloy dust)		>98%
PM (Titanium dust)		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

20,000 ACFM @ 4.5" SP; 144 bags per section; four sections total, three active sections, one cleaning section; Cloth area/section 8144ft² ; Temp. <100°F; Pulse Jet continuous cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit Installed before 1966

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-8B-C	List all emission units associated with this control device. PM-8-P, North-West Grinder
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Manufacturer: U.S. Air Filtration	Model number: 1010-WPT-144-6	Installation date: 08/15/2008
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM (Nickel alloy dust)		>98%
PM (Titanium dust)		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

12,500 cfm @ 5" max S.P. ΔP across bags, Pulse jet , 275 °F maximum operating temperature
 Fan ratio @ 12,500 cfm @ 20" S.P. W.G.
 Total 300 bags (6" x 144") for total cloth (16 oz polyester)
 Area = 5,655 sq ft, 2.21:1 air to cloth ratio

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emission Unit Installed before 1966.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-20-C	List all emission units associated with this control device. PM-20-P, PM Plate Plasma Torch
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Manufacturer: American Air Filter	Model number: Model 2	Installation date: 10/15/1989
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dust collector system consists of two hoods which collect the particulate produced from the process operation.
 Flow rate 3600 ft³/min; Average pressure drop 5 inches;
 2.25" X 6' Polyester Bags; Air to cloth ratio 4; filtering area 900 ft²; Pulse Jet cleaning method;
 Temperature is ambient.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: PM-26-C	List all emission units associated with this control device. PM-26-P, North-Central Grinder
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Manufacturer: Pangborn Corp.	Model number: C150	Installation date: MM/DD/1967
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		>98

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

38,000 CFM @ 7" SP; 150 bags; Cloth area/bag 83 ft² ; Temp. <100°F; Shaker style cleaning;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SC-2-C	List all emission units associated with this control device. SC-2-P, Service Center Saw
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Manufacturer: Uni-Wash, Inc.	Model number: MM-4000	Installation date: MM/DD/1970
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber (Mist)	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Fan 2,000CFM @ 10" SP; Drop-out Box by Airpro; Metal Mesh 24" X 24" X 1" Pre-filter; VEE Bag 10 Pocket Filter — 95% Collapsible Borosilicate Glass; 4" Mist Eliminator Pack

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Saw installed before 1970.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-1-C	List all emission units associated with this control device. SM-1-P, Continuous Anneal & Pickle Line (CAP)
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Manufacturer: HEIL® Process Equipment	Model number: 738	Installation date: 10/01/1984
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Mist Eliminator</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Acid Mist		95% of Mist / 99% Fumes

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Flow Rate 23,200 cfm; Pressure drop 3 inches; Packing Size 2 inches; Packing Depth 5.5 feet; Scrubber Solution Water; Solution circulation rate 350 gpm;

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** CAP Line Emissions Unit was installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-2-C	List all emission units associated with this control device. SM-2-P, CAP Line Shot Blaster
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Manufacturer: American Air Filter	Model number: Type N Size 46	Installation date: 1966
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM- Metals		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

11,000 CFM @ 2.8" S.P. Rotoclone Wet Scrubber. Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

Water level and fan operation monitored continuously. Water level switch checked quarterly and fan operation monitor checked daily.

Daily and monthly inspection of scrubber system in accordance with P/M checklist.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-3-C	List all emission units associated with this control device. SM-3-P, MKW Rolling Mill
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Manufacturer: American Air Filter	Model number: Rotoclone 1656297-7	Installation date: 1967
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

24" Rotoclone with 20 horsepower, 1775 RPM Motor. Ambient Air Temp

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Installed before 1974.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SM-10-C	List all emission units associated with this control device. SM-10-P, Strip Mill #2 CBU Grinder
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Manufacturer: Dracco-Fuller	Model number: Mark II	Installation date: 1965
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TPM- Metals		>98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

9,000 CFM @ 14" S.P. Fan; 3.5" Delta P Max; 56 Bags x 139"

(Returns filtered air to building on outdoors MR 2144) W1damper control

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** SM-10-P, Strip Mill #2 CBU Grinder, is exempt from 45CSR 7-4.1 and is not subject to an emission limit per WVDEP 2008 Fact Sheet.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Weekly Method 22 visual emissions checks. If no visible emissions observed after two weeks, monthly Method 22 checks. If no visible emission observed after 4 months, quarterly Method 22 checks. If visible emissions are observed, check will revert back to smaller time period.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-7A-1C, Cyclone for Kiln 1	List all emission units associated with this control device. TP-7A-P , Rotary Borings Kiln 1
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Manufacturer: EnviroAir Inc.	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dry cyclone
 3,000 acfm at 350 °F

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Cyclone will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:

 TP-7A-2C
 Thermal Oxidizer for Kiln 1

List all emission units associated with this control device.

TP-7A-P, Rotary Borings Kiln 1

Manufacturer:

 Enviro Air, Inc. thermal oxidizer,
 Maxon Kinemax Burner

Model number:

Unknown

Installation date:

MM/DD/2011

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input checked="" type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2.0 MM Btu/hr natural gas burner
 Typical combustion chamber temperature approximately 1,400 °F
 Minimum combustion chamber retention time of 0.6 seconds.
 Maximum loading of 80 lbs/hr of organics.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
 Continuous measurement and recording of temperature. Temperature checked daily.
 Annual validation of accuracy of thermocouple.
 Shutdown of the kiln system if it operates below 1,200 °F for 60 minutes or more

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-7A-3C Baghouse for Kiln 1	List all emission units associated with this control device. TP-7A-P, Rotary Borings Kiln 1
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Manufacturer: Donaldson Dalamatic	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm gas flow at 350 °F and -0.72 psia
 Pulse jet, 645 ft² total cloth area

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse exterior and interior bags will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-1C, Cyclone for Kiln 2	List all emission units associated with this control device. TP-8A-P , Rotary Borings Kiln 2
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Manufacturer: EnviroAir Inc.	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Dry cyclone
 3,000 acfm at 350 °F

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Cyclone will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-2C Thermal Oxidizer for Kiln 2	List all emission units associated with this control device. TP-8A-P, Rotary Borings Kiln 2
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Manufacturer: Enviro Air, Inc. thermal oxidizer, Maxon Kinemax Burner	Model number: Unknown	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2.0 MMBtu/hr natural gas burner
 Typical combustion chamber temperature approximately 1,400 °F
 Minimum combustion chamber retention time of 0.6 seconds.
 Maximum loading of 80 lbs/hr of organics.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H** CAM Plan already approved, therefore Attachment H not included.
 If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
 Continuous measurement and recording of temperature. Temperature checked daily.
 Annual validation of accuracy of thermocouple.
 Shutdown of the kiln system if it operates below 1,200 °F for 60 minutes or more.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-8A-3C Baghouse for Kiln 2	List all emission units associated with this control device. TP-8A-P, Rotary Borings Kiln 2
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Manufacturer: Donaldson Dalamatric	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm gas flow at 350 °F and -0.72 psia
 Pulse jet, 645 ft² total cloth area

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-9-C Electrostatic Precipitator	List all emission units associated with this control device. TP-9-P, Crusher
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Manufacturer: Horizon International	Model number: SEM.132	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input checked="" type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		88.3%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

13,200 acfm flow rate, 6 feet/second velocity, 0.4 in H₂O pressure drop
 12 Flat plate electrodes, 5 ft verticle height, and 1,560 ft² active collecting surface
 Manual plate cleaning system

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

ESP will be visually inspected every 3 months. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-10-C	List all emission units associated with this control device. TP-1-P, Tumble Blaster (Thistle Processing) TP-6-P, Cabinet Blaster (Thistle Processing) TP-10-P, Shot/Tumble Blaster (Scrap Metal Recycling)
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Manufacturer: Donaldson Dalamatic	Model number: DLMC 1/4/15	Installation date: MM/DD/2011
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

2,300 acfm at 350 °F and -0.72 psia
 Closed suction, Pulse jet, Total cloth area of 645 ft²

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Differential pressure controller will be monitored.

Baghouse exterior and interior bags will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TP-19-C Internal Baghouse	List all emission units associated with this control device. TP-19-P Viking Belt Blaster
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Manufacturer: Viking	Model number: 9-PDC	Installation date: MM/DD/2016
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Closed suction, filter cartridge and Pulse jet
 Air consumption is 1.2cubic ft per min @90psi

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Baghouse will be visually inspected every 30 days. Preventative or corrective action will be completed as expeditiously as possible.

Quarterly Method 22 visual emissions checks.

Attachment H
Compliance Assurance Monitoring Forms

Attachment H

Compliance Assurance Monitoring

The facility currently has approved compliance assurance (CAM) plans for the following control devices:

- Rotary Borings Kiln 1 Thermal Oxidizer (TP-7A-2C)
- Rotary Borings Kiln 2 Thermal Oxidizer (TP-8A-2C)
- Strip Mill Wet Scrubber (SM-2-C)
- Melt Shop Baghouses (MS-1-C1, MS-1-C2, MS-2-C)

Since CAM does not apply to any other control devices, no CAM forms have been provided.