

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 — 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.*

**Table of Contents**

**1.0. Emission Units and Active R13, R14, and R19 Permits..... 3**

**2.0. General Conditions..... 7**

**3.0. Facility-Wide Requirements and Permit Shield .....15**

**Source-specific Requirements**

**4.0. Indirect Fired Fuel Burning Units Requirements .....22**

**5.0. Direct Fired Furnace Requirements .....29**

**6.0. Hot Working Operations Requirements .....34**

**7.0. Cold Working Operations Requirements .....39**

**8.0. Woodworking Operations Requirements.....44**

**9.0. Process Tanks Requirements.....46**

**10.0. Lime Storage Requirements .....48**

**11.0. Degreaser Requirements.....50**

**12.0. Chrome Plating Requirements .....51**

**13.0. Thistle Processing, LLC Requirements .....58**

**14.0. Recycled Scrap Metal Requirements.....61**

  

**APPENDIX A - 45CSR2 & 45CSR10 Monitoring Plans .....72**

## 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
<b>Melt Shop</b>					
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		#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
<b>Primary Mill (PM)</b>					
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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
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
<b>Strip Mill (SM)</b>					
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
<b>Chipping Shop</b>					
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
<b>Bar &amp; Wire Mill</b>					
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
<b>Vacuum Induction Melting</b>					
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
<b>Machine Shop</b>					
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
<b>Cold Draw</b>					
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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
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
<b>Carpenter Shop</b>					
CA-1-P, CA-2-P	CA-1-S, CA-2-S	Woodcutting Operations	1958	3,000 lbs/hr	None
<b>Service Center</b>					
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
<b>Thistle Processing, LLC</b>					
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
<b>Scrap Metal Recycling</b>					
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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
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 person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). 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

<b>CAAA</b>	Clean Air Act Amendments	<b>NSPS</b>	New Source Performance Standards
<b>CBI</b>	Confidential Business Information	<b>PM</b>	Particulate Matter
<b>CEM</b>	Continuous Emission Monitor	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CES</b>	Certified Emission Statement	<b>pph</b>	Pounds per Hour
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>ppm</b>	Parts per Million
<b>CO</b>	Carbon Monoxide	<b>PSD</b>	Prevention of Significant Deterioration
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>psi</b>	Pounds per Square Inch
<b>DAQ</b>	Division of Air Quality	<b>SIC</b>	Standard Industrial Classification
<b>DEP</b>	Department of Environmental Protection	<b>SIP</b>	State Implementation Plan
<b>FOIA</b>	Freedom of Information Act	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>HAP</b>	Hazardous Air Pollutant	<b>TAP</b>	Toxic Air Pollutant
<b>HON</b>	Hazardous Organic NESHAP	<b>TPY</b>	Tons per Year
<b>HP</b>	Horsepower	<b>TRS</b>	Total Reduced Sulfur
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>TSP</b>	Total Suspended Particulate
<b>LDAR</b>	Leak Detection and Repair	<b>USEPA</b>	United States Environmental Protection Agency
<b>m</b>	Thousand	<b>UTM</b>	Universal Transverse Mercator
<b>MACT</b>	Maximum Achievable Control Technology	<b>VEE</b>	Visual Emissions Evaluation
<b>mm</b>	Million	<b>VOC</b>	Volatile Organic Compounds
<b>mmBtu/hr</b>	Million British Thermal Units per Hour		
<b>mmft<sup>3</sup>/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour		
<b>NA or N/A</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		
<b>NO<sub>x</sub></b>	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§30-2.40]**

## **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§30-5.6.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§30-5.1.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 source-specific 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 source-specific 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 §§ 22-5-4(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 57<sup>th</sup> 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 Enforcement<sup>1</sup>:**

DEPAirQualityReports@wv.gov

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

3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 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](mailto: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](mailto: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 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 V.I.M. boiler was constructed before June 9, 1989 and 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 m<sup>3</sup> and less than 151 m<sup>3</sup>, 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: 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: 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 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 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<sub>x</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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); 45CSR16 (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); 45CSR16 (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-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)]**

- 4.5.4.** 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 SO<sub>2</sub> 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); 45CSR16 (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); 45CSR16 (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 <sub>x</sub>		SO <sub>2</sub>		CO		PM/PM <sub>10</sub> /PM <sub>2.5</sub>		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  $26.0 \times 10^6$  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 ft<sup>3</sup>/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 <sup>(2)</sup>	lb/hr	tons/yr
CO	2.74	9.60	5.48	19.2
NO <sub>x</sub>	1.88	5.26	3.76	10.52
PM <sub>10</sub>	1.26	4.24	2.52	8.48
SO <sub>2</sub>	0.225	0.79	0.45	1.58
VOC's	0.1 <sup>(1)</sup>	0.35	0.2	0.7

Note: <sup>(1)</sup> Hourly emission rate based on heating value of natural gas (1,100 Btu/ft<sup>3</sup>)

<sup>(2)</sup> 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 ft<sup>3</sup>/hr, or a rolling yearly total of 119.5 MM ft<sup>3</sup>/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<sub>x</sub> 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.

<b>Equipment</b>	<b>Unit ID</b>	<b>Maximum Allowable PM Emission Limit (lb/hr)</b>
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. 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 SO<sub>2</sub> 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-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.

<b>Equipment</b>	<b>Unit ID</b>	<b>Maximum Allowable PM Emission Limit (lb/hr)</b>
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
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.

<b>Equipment</b>	<b>Maximum Allowable Emission Limit</b>
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 ( $6.6 \times 10^{-6}$  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  $\pm 2$  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  $\pm 2$  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 <sup>(1)</sup>

<sup>(1)</sup> 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 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 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:
- The date, place as defined in this permit and time of sampling or measurements;
  - The date(s) analyses were performed;
  - The company or entity that performed the analyses;
  - The analytical techniques or methods used;
  - The results of the analyses; and
  - 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 <sup>(1)</sup>
Particulate Matter (PM)	0.5	1.75
Hazardous Air Pollutants (HAP) <sup>(2)</sup>	0.43	1.49

<sup>(1)</sup> 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.

<sup>(2)</sup> 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 <sup>(1)</sup>	8,975 <sup>(1)</sup>	
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	---	

<sup>(1)</sup> 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 <sup>(1)(2)</sup>	tpy <sup>(1)(2)</sup>
Particulate Matter (PM)	1.75	2.20
<sup>(3)</sup> Hazardous Air Pollutants (HAP)	1.49	1.90

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

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

<sup>(3)</sup> 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 <sup>(1)</sup>
Nitrogen Oxide (NO <sub>x</sub> )	0.09	0.36
Carbon Monoxide (CO)	0.07	0.3

<sup>(1)</sup> 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 <sup>(1)</sup>
Nitrogen Oxide (NO <sub>x</sub> )	0.05	0.19
Carbon Monoxide (CO)	0.04	0.16

<sup>(1)</sup> 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 <sup>(1)(2)</sup>	tpy <sup>(1)(2)</sup>
Particulate Matter (PM)	0.26	0.05
Hazardous Air Pollutants (HAP) <sup>(3)</sup>	0.04	0.01

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

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

<sup>(3)</sup> 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 <sup>(1)</sup>
Nitrogen Oxide (NO <sub>x</sub> )	0.2	0.86
Carbon Monoxide (CO)	0.17	0.72

<sup>(1)</sup> 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 <sup>(1)</sup>	tpy <sup>(1)(2)</sup>
Particulate Matter (PM)	0.01	0.01
Sulfur Dioxide (SO <sub>2</sub> )	0.8	2.46
Nitrogen Oxide (NO <sub>x</sub> )	0.27	1.18
Carbon Monoxide (CO)	0.23	0.99
Volatile Organic Compounds	0.8	3.55

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

<sup>(2)</sup> 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 (SO<sub>2</sub>) 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 <sup>(1)</sup>	tpy <sup>(2)</sup>
Particulate Matter (PM)	0.03	0.13
Hazardous Air Pollutants (HAP)	0.01	0.01

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

<sup>(2)</sup> 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 <sup>(1)</sup>	tpy <sup>(2)</sup>
Particulate Matter (PM)	0.02	0.07
Hazardous Air Pollutants (HAP)	0.01	0.01

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

<sup>(2)</sup> 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 <sup>(1)</sup>	tpy <sup>(2)</sup>
Particulate Matter (PM)	0.05	0.19
Hazardous Air Pollutants (HAP) <sup>(3)</sup>	0.04	0.01

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

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

<sup>(3)</sup> 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  $\pm 5$  °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.

<b>Process ID #</b>	<b>Description</b>	<b>MMBTU/HR</b>	<b>Allowable Rate</b>
B – 1a	Boiler	33.5	$(33.5) (0.09) = 3.0 \text{ \#/hr}$
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. Boiler (B-1a) and VIM Boiler (B-4) have inputs of 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	Boiler	33.5	$(33.5) (3.2) = 107.2 \text{ \#/hr}$
B – 4	VIM Boiler	26.0	$(26.0) (3.2) = 83.2 \text{ \#/hr}$
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. Boiler (B-1a) and VIM Boiler (B-4) have inputs of 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, SO<sub>2</sub> Stack Emission Rates**

Huntington Alloys – Products of Natural Gas Combustion				Tons per Year - Potential to Emit – SO <sub>2</sub>				
Description	Emission Point #	Capacity GAS MMBTU/hr	SO <sub>2</sub> **	PTE	PTE	PTE	PTE	
			Allowable lbs/hour	Sulfur Max PPM Nat. Gas	SO <sub>2</sub> Ton/Year	SO <sub>2</sub> Pound/Yr	SO <sub>2</sub> 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

Huntington Alloys – Products of Natural Gas Combustion				Tons per Year - Potential to Emit – SO <sub>2</sub>				
	Description	Emission Point #	Capacity	SO <sub>2</sub> **	PTE	PTE	PTE	PTE
			GAS MMBTU/hr	Allowable lbs/hour	Sulfur Max PPM Nat. Gas	SO <sub>2</sub> Ton/Year	SO <sub>2</sub> Pound/Yr	SO <sub>2</sub> Pound/Hr
Indirect Fired Sources	Boiler	B-1a	33.5	103.9	<10.0 PPM	0.068	136	0.016
	VIM Boiler	B-4	26.0	83.2	<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 3.2 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 <sup>(1)</sup>	Equivalent maximum monthly SO <sub>2</sub> Emissions as discharged from baghouse Parts per Million <sup>(2)</sup>	Maximum Allowable SO <sub>2</sub> Emissions as allowed by Regulation 10 Parts per Million <sup>(3)</sup>
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 SO<sub>2</sub> 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<sub>2</sub>SO<sub>4</sub>) 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**

<b>Quarter:</b>	<b>Year:</b>
-----------------	--------------

Quarter	Highest Quarterly Heat Sulfur Percentage Melt Shop EAF's <sup>(1)</sup>	Equivalent maximum quarterly SO <sub>2</sub> Emissions as discharged from baghouse Parts per Million <sup>(2)</sup>	Maximum Allowable SO <sub>2</sub> Emissions as allowed by Regulation 10 Parts per Million <sup>(3)</sup>
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 SO<sub>2</sub> 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.*

<b>Signature:</b>	Vice President & General Manager	
<b>Responsible Official</b>	Title	<b>Date:</b>