Constellium

Constellium Rolled Products Ravenswood, LLC
859 Century Road
PO Box 68
Ravenswood, WV 26164
USA
1-800-258-6686

February 19, 2018

Mr. William Durham
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Subject: Constellium Rolled Products Ravenswood, LLC; Ravenswood, WV
Title V Renewal Application

Dear Mr. Durham:

Enclosed are four electronic copies of a Title V Renewal Application for Constellium Rolled Products Ravenswood, LLC (Constellium) in Ravenswood, WV.

Constellium is asserting claims of confidentially relating to maximum design capability and maximum throughout rates for the Equipment contained in Attachment D– Equipment Tables and Attachment E – Emission Unit Forms. Pages considered confidential are water marked "Claimed Confidential" and dated. Additionally, Constellium is providing the following in accordance with WVDEP procedures for confidential submittals:

This form contains each of the required elements for the cover document required under 45CSR31.

<table>
<tr><td>Company Name</td><td>Constellium Rolled Products Ravenswood, LLC</td><td colspan="2">Responsible Official</td><td>Lloyd A. Stemple, CEO</td></tr>
<tr><td>Company Address</td><td>859 Century Road</td><td rowspan="7">Confidential Information Designee in State of WV</td><td>Name</td><td>Mike Steele</td></tr>
<tr><td></td><td>Ravenswood, WV 26164</td><td>Title</td><td>Environmental Manager</td></tr>
<tr><td></td><td></td><td>Address</td><td>859 Century Road</td></tr>
<tr><td rowspan="3">Person/Title Submitting Confidential Information</td><td></td><td></td><td>Ravenswood, WV 26164</td></tr>
<tr><td rowspan="2"></td><td>Phone</td><td>304-273-6978</td></tr>
<tr><td>Email</td><td>Mike.steele@constellium.com</td></tr>
</table>

Constellium

Reason for Submittal of Confidential Information:
See below.

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
Attachment D & E – Design and Maximum Throughput Rates	Constellium believes that disclosure of the information is likely to cause substantial harm to the business's competitive position	Indefinite

Responsible Official Signature:	Lloyd A. Steele
Responsible Official Title:	CEO, Constellium Rolled Products Ravenswood, LLC
Date Signed:	2/20/18

Pages with confidential information removed are watermarked "Redacted Copy – Claim of Confidentiality":

Please feel free to contact me at (304) 273-6978 or mike.steele@constellium.com with any questions.

Sincerely,

Michael E. Steele
Environmental Manager

cc: David Kirby; Project Integration

Title V Permit Renewal Application

Constellium Rolled Products-Ravenswood, LLC

Ravenswood, West Virginia

February 2018

Prepared by:

Project Integration, Inc.
116 Hidden Hill Road
PO Box 170065
Spartanburg, South Carolina 29301

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List of Appendices

Section 1
Introduction

Constellium Rolled Products-Ravenswood, Ravenswood LLC (Constellium) was issued Title V renewal permit (R30-03500043-2013) for its Ravenswood, West Virginia facility on August 19, 2013. The facility had a significant modification added to the permit in January 2018 for the installation of a 755 horsepower (HP) emergency diesel generator (Permit Action Number SM01). The permit expires on August 19, 2018. The permit requires that a renewal application be submitted to the state at least six (6) months prior to the expiration date of the permit. This equates to February 19, 2018. Constellium is submitting this permit application to satisfy that requirement. Additionally, during the renewal, Constellium is updating the information submitted to more accurately reflect present facility operations as well as to clarify the source information to more accurately equate to current regulations.

1.1 Purpose and Scope

Constellium retained Project Integration, Inc. (PI) to assist in preparing the environmental documentation for the Title V Renewal Application. The purpose of this document is to satisfy the permitting requirements necessary to renew Constellium's Title V permit. The application consists of a facility process description, a section outlining the facility changes since the previous application and the permit modifications that are being requested. Additionally, a summary of air emissions, a regulatory review, completed West Virginia Department of Environmental Protection (WV DEP) Title V application forms (Appendix A), Permit Shield Applicability information (Appendix B), and Process Flow Diagrams, a Plot Plan and a facility Site Map (Appendix C).

1.2 Facility Location and Contact

The mailing address and contact for the Constellium facility is as follows:

Constellium Rolled Products-Ravenswood, Ravenswood LLC
Route 2 South
Ravenswood, West Virginia 26164

The facility contact is as follows:

Mr. Mike Steele
Manager, Environmental Affairs

Section 2
Process Description

The Constellium facility located in Ravenswood, West Virginia, consists of casting and fabrication operations. The existing air permit is separated into the casting area and four separate areas in fabrication, as well as miscellaneous sources. The casting operation is located in the cast house, which contains 9 direct chill (DC) processing units. Each of the DC processing units consists of one to two melting furnaces, a holding furnace, a degassing/filtering operation, and a casting station. The secondary aluminum melting process is initiated by placing scrap into the top of the furnace by sliding the dome off the furnace body. After the charging is complete, the dome is replaced on the top of the furnace, and natural gas-fired burners heat the aluminum to its melting point (approximately 1,400°F). During this heating process, molten aluminum may be charged into the furnace. Once the solid metal has been liquefied, the burner firing rate is reduced such that only enough heat is added to keep the metal molten. Alloying agents and salt flux are added to the molten aluminum in each melting furnace as required, and the metal is stirred. The molten aluminum is then sampled to determine if it has obtained the desired properties.

If no further alloying is required, the molten aluminum is transferred from the melting furnace to the holding furnace through an open trough via gravity. In the holding furnace, gas burners maintain the temperature so that the aluminum remains molten. Flux materials are added to remove impurities from the aluminum. Fluxing causes impurities to float to the top of the metal where it is skimmed off as dross. After completion of fluxing, samples of the metal are drawn from the holding furnace and analyzed for purity and alloy specification.

Upon passing this quality analysis check, the cast pit is prepared and the molten aluminum is poured from the holder through the degassing/filtering operation. In the degassing/ filtering operation, argon gas (with a nitrogen gas cover) is added to the metal to further remove impurities and hydrogen. The metal is also filtered prior to casting. The molten aluminum then flows into the cast pit where ingots are formed.

The ingots are transported to the fabrication facility. The fabrication area is divided into four different areas: Hot Line, Cold Line, Plate, and Finishing. Aluminum is sent to the various areas depending on the type of aluminum alloy as well as the desired final product of the aluminum. The aluminum is finished into either coil or plate stock.

Process Flow Diagrams are included in Appendix C to provide visual reference.

Section 3
Facility and Permit Changes

Constellium has prepared updated WV DEP Title V application forms. The updated forms have been revised to reflect present operations and include permit determination changes for the facility. Additionally, the submission also includes permit change requests. These requests include the modification of some permit condition terms and the addition or removal of some equipment. These changes are discussed in Subsections 3.1.

3.1 Revisions to Permit

The major changes reflected in the new Title V application forms included in Appendix A are as follows:

Casting Department 005

1. Removal of Induction Furnace East, ID 005P104;
2. Removal of Induction Furnace West, ID 005P105;
3. Removal of Dross Cooler/Breaker, ID 005P106;
4. Removal of Rotary Furnace, ID 005P142.

Hot Line 006

1. Addition of Ingot Pusher Furnace (ID 006P102), authorized by permit R13-2376D, startup March 2017, via the inclusion of WV DEP forms Attachment S "Title V Permit Revision Information" and this renewal application;
2. Removal of Walking Beam Furnace, ID 006P104;

Miscellaneous Sources 010

1. Addition of a 755 Horsepower Emergency Generator, authorized by construction permit G60-065;
2. Revision to the number of existing Spark Ignition (SI) Emergency Generators – The current permit lists one 20 KW SI Generator. There are in fact three SI Emergency Generators as detailed in Section 5.9.

3.2 Permit Shield

Constellium requests that the permit shield remain in place for the facility through the permit renewal. A copy of the permit shield information is provided in Attachment B.

Section 4
Summary of Emissions

The Constellium facility emissions consist of both criteria pollutants PM, NO_X, SO_2, CO, and VOCs as well as HAPs. The facility is a major source of both criteria pollutants and HAPs. The facility is considered a major source for Title V, Maximum Achievable Control Technology (MACT), and Prevention of Significant Deterioration (PSD). Emission calculations have been previously supplied in the original Title V application, the first Title V renewal and yearly in the facility Emission Inventory.

Overall, the facility emissions are such that Constellium will continue under the Title V permit. The facility employs the use of baghouses in many areas which minimizes potential PM and HCl emissions. Nevertheless, the total emissions are still significantly greater than major source thresholds.

Section 5
Regulatory Review

The Constellium facility is a major source for Title V. Based on this renewal application, Constellium wishes to maintain its Title V status. The facility information collected and provided in this application was used to provide an outline of the applicability of both federal and state regulations. This outline identifies many of the regulations that are applicable or may be applicable to the facility. An exhaustive list of regulations and their applicability are provided in the Permit Shield review in Attachment B.

5.1 Regulation 45CSR7 (Prevent and Control PM from Manufacturing Processes)

The facility has enumerable pieces of equipment that are subject to this requirement. The limit is based on the Process Weight Rate (PWR) of material processed by the furnace. The requirement is covered in Conditions 4.1.1., 5.1.1., 6.1.1., 7.1.1., 8.1.1., and 9.1.1. of the permit. These emissions from each piece of equipment are well below the maximum PM emission rates of each piece of equipment. Therefore, the equipment at the facility should easily continue to demonstrate compliance with this regulation.

5.2 Regulation 45CSR13 (Construction Permitting)

Any additions at the facility are reviewed to determine if they trigger Regulation 13 permitting. This review is completed by reviewing the potential increase in emissions to determine if they exceed both 6 lb/hr and 10 tpy of emissions of any criteria pollutant. If the addition is below the permitting thresholds to require a Regulation 13 permit application, then a Permit Determination is completed for the addition. The following construction permitting activities have occurred during the permit term:

- Addition of Ingot Pusher Furnace (ID 006P102), authorized by permit R13-2376D;
- Addition of a 755 Horsepower Emergency Generator, authorized by construction permit G60-065

5.3 Regulation 45CSR14 (Prevention of Significant Deterioration)

The Constellium facility is a major source under the Prevention of Significant Deterioration (PSD) regulation. Due to the facility's major source status, there are emission limits for criteria

pollutants that cannot be broken without extensive permitting requirements. The addition of any new equipment requires a review of 45 CSR 14 to verify that PSD is not triggered.

5.4 Regulation 45CSR15 (Federal NESHAPs, 40 CFR Part 61)

The Constellium facility does not have equipment that is subject to any of the 40CFR Part 61 regulations. A complete list of requirements along with their applicability is provided in Appendix B.

5.5 Regulation 45CSR16 (Federal NSPSs, 40 CFR Part 60)

Three of the Emergency Generators (Cummins, Generac and Mersino) are considered new engines since they were constructed after June 12, 2006. While RICE MACT is applicable to those engines the only requirements are to be in compliance with the New Source Performance Standards (NSPS) for internal combustion engines (ICE) at 60 CFR 60, Subpart IIII (CI engines) and Subpart JJJJ (SI engines). A complete list of requirements along with their applicability is provided in Appendix B.

5.6 Regulation 45CSR19 (New Source Review)

The Constellium facility is a major source under the New Source Review (NSR) regulation. The facility is located in an attainment area for all pollutants. NSR only applies in areas of non-attainment. In areas of attainment, PSD takes precedence. Therefore, NSR is not applicable at this time.

5.7 Regulation 45CSR29 (VOC & NOx Emission Reporting)

This regulation is only applicable to facilities located in Putnam, Kanawha, Cabell, Wayne, Wood, and Greenbrier counties. The Constellium facility is located in Jackson County. Therefore, this regulation is not applicable.

5.8 Regulation 45CSR30 (Title V)

Constellium presently operates under Title V permit R30-03500043-2013. This submittal is being provided to meet the requirements for a renewal application.

5.9 Regulation 45CSR34 (Federal NESHAPs/MACT)

The Constellium facility is a major source under Title V and is subject to the Federal NESHAPs. The facility presently complies with the Secondary Aluminum NESHAP, Subpart RRR for the equipment in the cast house. The requirements are listed in the existing Title V permit.

The Constellium fabrication plant does not include any boilers but operates several process heaters that must comply with the requirements of Industrial, Institutional, and Commercial Boiler and Process Heater NESHAP, Subpart DDDDD. Constellium has completed and submitted the initial notification of compliance for the Subpart DDDDD. Process heaters fired with natural gas do not have any emission limitations but there are work practice requirements. Two of the work practice requirements of Boiler MACT, for all affected process heaters, are a one-time energy assessment and a tune-up of the process heater.

Constellium Rolled Products Ravenswood, LLC (Constellium) in Ravenswood, WV owns and operates both emergency and non-emergency internal combustion engines which are subject to the requirements of the Reciprocating Internal Combustion Engines NESHAP (Subpart ZZZZ) regulations, commonly referred to as the RICE MACT.

There are seven engines at the facility six are classified as emergency engines and one is classified as a non-emergency engine. Four of the engines are categorized in the RICE MACT as Compression Ignition (CI) engines that burn diesel fuel and three are categorized as Spark Ignition (SI) engines that burn gas or gasoline. Three of the engines are classified as new engines in the RICE MACT (Generac, Mersino and Cummins) since they commenced construction after June 12, 2006. A summary of the seven engines is presented in the following table.

Engine Manufacturer	Model No.	Engine Type (CI or SI)	Installation Date	Rated Capacity (BHP/ kW)	Fuel	Use
Waukesha	180DLC	CI	1950's	25 HP	Diesel	Emergency Pager
John Deere	RG608/A11 8395	CI	2001-2002	275 HP	Diesel	Emergency Fire Pump
Generac	128557600 100	SI	2009 (New – NSPS)	9kW	Gas	Emergency Phone System
Ford	429	SI	1980's	220 HP	Gasoline	Emergency Deep Well Engine

Engine Manufacturer	Model No.	Engine Type (CI or SI)	Installation Date	Rated Capacity (BHP/ kW)	Fuel	Use
Ford	460	SI	1980's	220 HP	Gasoline	Emergency Deep Well Engine
Mersino	1233606	CI	2012 (New – NSPS)	35 HP	Diesel	Non-Emergency WWT Feed Tanks
Cummins	DFEG-1342631	CI	2014 (New – NSPS)	755 HP	Diesel	Emergency – Computer Building

The RICE MACT regulates emergency engines with management and work practice standards. There are no emission standards for emergency engines.

Each Constellium emergency engine has a non-resettable hour meter to demonstrate compliance with the operational limitation of 100 hours per year (hr/yr) for maintenance and readiness checking and the maximum limit of 50 hr/yr for non-emergency use. The engines are not used for peak shaving or for any financial contract. The facility has developed and implemented an Operations and Maintenance Plan to ensure continuous regulatory compliance and proper operation of the emergency engines.

All engines are in compliance with the RICE MACT, 40 CFR 63, Subpart ZZZZ. As stated in the RICE MACT regulations (40 CFR 63.6590(c)(7)) there are no specific requirements in the RICE MACT for new engines (those which commenced construction after June 12, 2006). The only requirement is compliance with the New Source Performance Standards (NSPS) at 40 CFR 60, Subpart IIII for CI engines and Subpart JJJJ for SI engines. The two new engines shown above, Waukesha and Mersino, are in compliance with the respective NSPS.

5.10 Regulation 40 CFR Part 64 (Compliance Assurance Monitoring)

The Constellium facility has two demisters (007C101 and 007C102) that are potentially subject to the CAM regulation. These demisters would be potentially subject when controlling emissions from the following sources:

1) 007C101 controlling the 72 Inch Single Stand Cold Mill 384 (007P101)

2) 007C102 controlling the 72 Inch Tandem Stand Cold Mill 382 (007P102)

Presently both of the Cold Mills are not operational. Title V Permit Condition 6.1.7 requires Constellium to develop and submit a CAM plan that meets the requirements of 40 CFR Part 64 at least 90 days prior to the proposed restart date of either piece of equipment. The

requirements of the CAM plan will be submitted as part of a Title V Modification and Constellium cannot restart either piece of equipment until the Title V Permit Modification has been approved.

Appendix A
Title V Renewal Permit Application

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.wvdep.org/daq

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):** Constellium Rolled Products-Ravenswood, LLC	**2. Facility Name or Location:** Constellium Rolled Products-Ravenswood, LLC
3. DAQ Plant ID No.: 0 3 5 — 0 0 0 4 3	**4. Federal Employer ID No. (FEIN):** 2 0 - 0 8 4 - 3 0 1 8

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? 1954
☒ Permit Renewal — What is the expiration date of the existing permit? 08/19/2018
☐ Update to Initial Permit Application

6. Type of Business Entity: ☒ Corporation ☐ Governmental Agency ☐ Partnership ☐ Limited Partnership	**7. Is the Applicant the:** ☐ Owner ☐ Operator ☒ Both If the Applicant is not both the owner and operator, please provide the name and address of the other party. _____ _____ _____
8. Number of onsite employees: 900	

9. Governmental Code:

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. Business Confidentiality Claims

Does this application include confidential information (per 45CSR31)? ☒ Yes ☐ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: P.O. Box 68		
City: Ravenswood	**State:** WV	**Zip: 26164-**
Telephone Number: (304) 273-7000	**Fax Number:** (304) 273-6757	

12. Facility Location		
Street: Century Road	**City:** Ravenswood	**County:** Jackson
UTM Easting: 428.30 km	**UTM Northing:** 4308.60 km	**Zone:** ☒ 17 or ☐ 18
Directions: Facility located along Century Road (County Road 20/2) off of WV State Road 2, just south of Ravenswood, Jackson County		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☐ Yes ☒ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☒ Yes ☐ No		**If yes, name the affected state(s).** Ohio
Is facility located within 100 km of a Class I Area[1]? ☐ Yes ☒ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☒ No		**If yes, name the area(s).**

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: Lloyd A. Stemple		**Title:** CEO
Street or P.O. Box: 859 Century Road, P.O. Box 68		
City: Ravenswood	**State:** WV	**Zip: 26164-**
Telephone Number: 304-273-7000	**Fax Number:** (304) 273-6320	
E-mail address: Lloyd.Stemple@constellium.com		
Environmental Contact: Mike Steele		**Title:** Manager, Environmental Affairs
Street or P.O. Box: Route 2 South		
City: Ravenswood	**State:** WV	**Zip: 26164-**
Telephone Number: (304) 273-6978	**Fax Number:** (304) 273-6757	
E-mail address: mike.steele@constellium.com		
Application Preparer: David Kirby		**Title:** Project Manager
Company: Project Integration, Inc.		
Street or P.O. Box: 116 Hidden Hill Road		
City: Spartanburg	**State:** SC	**Zip: 29301-**
Telephone Number: (864) 479-6802	**Fax Number:** (864) 334-5143	
E-mail address: dlk@pintegration.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Secondary Aluminum Manufacturing	Ingot, plate, sheet, coil	331314, 331315	3353

Provide a general description of operations.

The facility operates a secondary aluminum operation at the Ravenswood, West Virginia facility. The facility melts aluminum in 22 furnaces in the cast house. The metal is cast into ingot for further processing. From the cast house the aluminum is sent to fabrication plant, which consists of hot rolling, cold rolling, plate, and general finishing. In fabrication the metal is reheated to give it particular characteristics and is also rolled on one of the facility's hot or cold mills. After the metal has been finished into coil or plate is warehoused and prepared for shipping to the customer.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☒ PSD (45CSR14)
☒ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☒ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☒ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☐ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☒ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☐ CAIR NO_x Ozone Season Trading Program (45CSR40)

19. Non Applicability Determinations
List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies. Please See Appendix B of this document.
☒ Permit Shield

19. Non Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

Please see the attached permit shield document provided in Attachment B.

X Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

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 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 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.** This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10. This stationary source 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 emission of smoke and/or particulate matter into the open air from

any process source operation which is greater than twenty (20) percent opacity, except as noted in 3.1.10. *(005P104, 005P105, 005P106, 005P107, 005P108, 005P109, 005P111, 005P112, 005P113, 005P114, 005P116, 005P139, 005P140, 005P117, 005P118, 005P119, 005P121, 005P122, 005P123, 005P124, 005P125, 005P141, 005P142, 005P138, 006P104, 006P105, 006P107, 006P109, 006P110, 006P113, 006P119, 006P120, 007P101, 007P102, 007P103, 007P105, 007P107, 008P102, 008P104, 008P105, 008P110, 008P112, 008P113, 008P111, 008P114, 009P103, 009P104, and 010P201)*

[45CSR13, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR13, R13-0383, 4.1.2; 45CSR§7-3.1]

3.1.10. The provision of 3.1.9 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. *(005P104, 005P105, 005P106, 005P107, 005P108, 005P109, 005P111, 005P112, 005P113, 005P114, 005P116, 005P139, 005P140, 005P117, 005P118, 005P119, 005P121, 005P122, 005P123, 005P124, 005P125, 005P141, 005P142, 005P138, 006P104, 006P105, 006P107, 006P109, 006P110, 006P113, 006P119, 006P120, 007P101, 007P102, 007P103, 007P105, 007P107, 008P102, 008P104, 008P105, 008P110, 008P112, 008P113, 008P111, 008P114, 009P103, 009P104, and 010P201)*

[45CSR13, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR13, R13-0383, 4.1.3; 45CSR§7-3.2]

3.1.11. 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, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR§7-5.1]

3.1.12. 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, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR§7-5.2]

No person shall circumvent the provisions of 45CSR7 by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.

[45CSR13, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR§7-4.3]

3.1.14. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

[45CSR13, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR§7-4.12]

3.1.15. Due to unavoidable malfunction of equipment, emissions exceeding those set forth 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.

[45CSR13, R13-2102, B.3; 45CSR13, R13-2376, B.1 and B.2; 45CSR§7-9.1]

The permittee shall burn natural gas meeting the Federal Energy Regulatory Commission (FERC) requirements exclusively for all furnaces.

[45CSR§30-12.7]

3.1.17. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of R13-0383A (005C105, 007C101, and 007C102) 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, R13-0383, 4.1.22; 45CSR§13-5.11]

3.1.18. a. **40 C.F.R. 63, Subpart DDDDD.** The following natural gas-fired process heaters shall comply with all applicable requirements for existing affected sources, pursuant to 40 C.F.R. 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 as amended by US EPA: *Walking Beam Furnace (006P102), Heat Soaking Pits (006P105), Reheat Furnaces (006P109), Ingot Pusher Furnace (006P119), Preheat Furnace (006P120), Cold Roll Annealing Furnaces (007P107), Salem 12 Zone Heat Treat Furnace (008P102), 120 Foot Aging Furnace (008P104), 60 Foot Aging Furnace (008P105), Horizontal Heat Treat Furnace (008P110), Horizontal Heat Treat Furnace Addition (008P112), Horizontal Heat Treat Furnace Addition #2 (008P113), Aging Furnace (008P111), Aging Furnace #2 (008P114), Coil Annealing Furnaces (009P103), and Coil Annealing Furnaces (009P104)*

[45CSR34; 40 C.F.R. § 63.7495(b)]

b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 C.F.R. 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 C.F.R. §63.7545(e).

[45CSR34; 40 C.F.R. § 63.7545(e); 45CSR§30-6.5.b.]

Monitoring Requirements

3.2.1. Visual emission checks of each emission point subject to an opacity limit under 3.1.9 and 3.1.10 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 45CSR7." 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.

[45CSR13, R13-0383, 4.3.1; 45CSR§30-5.1.c]

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:

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, R13-0383, 4.4.1.]

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-0383, 4.4.1.]

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 particulate matter emission sources as required by 3.1.11 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 particulate matter 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 3.1.12 applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c]

3.4.6. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed inSection 1.0 of R13-0383A (005C105, 007C101, and 007C102), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-0383, 4.4.2]

3.4.7. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed

in Section 1.0 of R13-0383A (005C105, 007C101, and 007C102), 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, R13-0383, 4.4.3]

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 certification to the USEPA as required in 3.5.5 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, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on anannual basis in accordance with the submittal requirements of the Division of Air Quality.
[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 annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[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.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

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. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. 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.]
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. 45CSR10 – "To Prevent and Control Air Pollution from the Emission of Sulfur Oxides." 45CSR§10-4.1.e exempts manufacturing process source operations from the 45CSR§10-4.1 sulfur dioxide concentration limit of 2,000 ppm_v if the potential to emit from the manufacturing process source operation is less than 500 pounds per year of sulfur oxides. All manufacturing process source operations at CRP have the potential to emit less than 500 lbs/year of sulfur oxides.
b. 40 C.F.R. 60, Subpart Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units." The facility does not operate any boilers. All steam is purchased from the adjacent facility; therefore, 40 C.F.R. 60, Subpart Dc does not apply.
c. 40 C.F.R. 60, Subpart Kb – "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. 40 C.F.R. 60, Subpart Kb, as amended on October 15, 2003, applies to each storage vessel with a capacity greater than or equal to 75 m^3 that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. All tanks at this facility which store volatile organic liquid were either installed before July 23, 1984 or have a storage capacity of less than 75 m^3.
d. 40 C.F.R. 63, Subpart LL – "National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants." The facility is adjacent to a primary aluminum smelter and previously the entire facility was an integrated facility. However, another corporation now owns all primary aluminum operations and CRP only has secondary aluminum operations.

X Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R13-0017	01/10/1974	
R13-0072	05/23/1974	
R13-0383/ R13-0383A	02/27/1978; update 8/5/2011	
R13-2102	07/1/1997	
R13-2376	07/08/2002	
R13-2376	06/24/2015	
G60-065	01/11/2018	
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22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
R30-03500043-2002	08/16/2008	
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Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	471
Nitrogen Oxides (NO_X)	715
Lead (Pb)	Neg.
Particulate Matter ($PM_{2.5}$)[1]	485
Particulate Matter (PM_{10})[1]	485
Total Particulate Matter (TSP)	701
Sulfur Dioxide (SO_2)	4
Volatile Organic Compounds (VOC)	225
Hazardous Air Pollutants[2]	Potential Emissions
HCl	393
Cl2	0.1
HF	0.7
Regulated Pollutants other than Criteria and HAP	Potential Emissions

[1]$PM_{2.5}$ and PM_{10} are components of TSP.
[2]For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☒	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☒	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☐	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☒	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☒	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☐	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☐	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☐	18.	Emergency road flares.
☒	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: <u>Space heaters (180,000 Btu/hr each) diesel</u> _____ _____ _____ _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____
☐	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☐	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☒	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☒	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☒	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☒	33.	Hydraulic and hydrostatic testing equipment.
☐	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☐	37.	Laundry activities, except for dry-cleaning and steam boilers.
☒	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☐	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant

24. Insignificant Activities (Check all that apply)		
		owners/operators must still get a permit if otherwise requested.)
☒	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☒	43.	Process water filtration systems and demineralizers.
☒	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☒	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☒	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☒	50.	Space heaters operating by direct heat transfer.
☐	51.	Steam cleaning operations.
☐	52.	Steam leaks.
☐	53.	Steam sterilizers.
☐	54.	Steam vents and safety relief valves.
☒	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☒	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☐	58.	Tobacco smoking rooms and areas.
☐	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table

Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.

26. Emission Units

For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.

For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.

27. Control Devices

For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.

For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 005C101 (Not in service due to removal of Induction Furnaces)	**List all emission units associated with this control device.** ~~Induction Furnace East (005P104) and Induction Furnace West (005P105)~~	
Manufacturer: Griffin Environmental Company, Inc.	**Model number:** MS-252-H(3)	**Installation date:** 1989

Type of Air Pollution Control Device:

__X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	95%	99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The baghouse has a flowrate of 16,960 acfm, a total cloth area of 13,854 ft^2 with an air-to-cloth ratio of 1.84/1. There are 756 Nomex bags and the system can withstand temperatures up to 350 deg. F.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is subject to Secondary Aluminum MACT Standard (40CFR63 Subpart RRR) and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop is measured to demonstrate compliance.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Lloyd A. Stemple	Title: CEO

Responsible official's signature:

Signature: Lloyd A. Stemple Signature Date: 4/20/18

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:	
☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☒	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.wvdep.org/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 005C102 (Not in service due to removal of Induction Furnaces)	**List all emission units associated with this control device.** ~~Induction Furnace East (005P104) and Induction Furnace West (005P105)~~	
Manufacturer: Griffin Environmental Company, Inc.	**Model number:** MS-252-H(3)	**Installation date:** 1989

Type of Air Pollution Control Device:

__X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	95%	99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The baghouse has a flowrate of 16,960 acfm, a total cloth area of 13,854 ft^2 with an air-to-cloth ratio of 1.84/1. There are 756 Nomex bags and the system can withstand temperatures up to 350 deg. F.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is subject to Secondary Aluminum MACT Standard (40CFR63 Subpart RRR) and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop is measured to demonstrate compliance.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 005C103(Not in service due to removal of Dross Cooler/Breaker)	**List all emission units associated with this control device.** ~~Dross Cooler/Breaker (001P106)~~	
Manufacturer:	**Model number:**	**Installation date:**

Type of Air Pollution Control Device:

__X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM		

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Pressure drop

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is subject to Secondary Aluminum MACT Standard (40CFR63 Subpart RRR) and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop is measured to demonstrate compliance.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 005C105	**List all emission units associated with this control device.** DC-5 Holding Furnace (005P121), DC-7 HF (005P123), DC-8 HF (005P124), DC-9 HF (005P125), DC-10 HF (005P141)	
Manufacturer: Bundy Environmental Technology, Inc.	**Model number:** Job # S-344	**Installation date:** 2001

Type of Air Pollution Control Device:

__X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe)_____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99%
HCl	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The baghouse is lime-injected and has a flow rate of 4,200 acfm, a total cloth area of 1,400 ft^2 and an operating air-to-cloth ratio of 3/1. The baghouse uses a pulse jet cleaning system. The system can handle air temperatures up to 350 deg. F and operates in the range of 5 inches of static pressure.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is subject to Secondary Aluminum MACT Standard (40CFR63 Subpart RRR) and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Lime flow rate, baghouse inlet temperature, and a bag leak detection system are used to demonstrate compliance.

ATTACHMENT G – Air Pollution Control Device Form

Control device ID number: 005C106 (Not in service due to removal of Rotary Furnace)	**List all emission units associated with this control device.** ~~Rotary Furnace (005P142)~~	
Manufacturer: Amerex Industries, Inc.	**Model number:** N/A	**Installation date:** 2001

Type of Air Pollution Control Device:

__X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99%
HCl	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The design flow is 2,600 acfm with a total filter cloth area of 1,000 ft^2 with an air-to-cloth ratio of 3/1. The system has a pulse jet cleaning system and can accept inlet air at temperatures us to 350 deg F.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is subject to Secondary Aluminum MACT Standard (40CFR63 Subpart RRR) and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Lime flow rate, baghouse inlet temperature, and a bag leak detection system is used to demonstrate compliance.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 007C101	**List all emission units associated with this control device.** 72 Inch Single Stand Cold Mill (384) (007P001)	
Manufacturer: Busch International, Inc.	**Model number:**	**Installation date:**

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	__X_ Other (describe) ___Mist Eliminator_____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Oil Mist (PM)	50%	50%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Nominal 62,000 cfm system

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions are completed as required in the permit. Pressure drop is also reviewed monthly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 007C102	**List all emission units associated with this control device.** 130 Inch Single Stand Cold Mill (007P105)	
Manufacturer: Busch International, Inc.	**Model number:**	**Installation date:**

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	__X_ Other (describe) __Mist Eliminator_____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Oil Mist (PM)	50%	50%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Nominal 62,000 cfm system

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is not a major source uncontrolled and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions are completed as required in the permit. Pressure drop is also reviewed monthly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 007C103	**List all emission units associated with this control device.** 5-Stand Cold Mill (007P105)	
Manufacturer: Busch International, Inc.	**Model number:**	**Installation date:**

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter
___ Carbon Bed Adsorber
___ Carbon Drum(s)
___ Catalytic Incinerator
___ Thermal Incinerator
___ Wet Plate Electrostatic Precipitator
___ Venturi Scrubber
___ Packed Tower Scrubber
___ Other Wet Scrubber
___ Condenser
___ Flare
___ Multiclone
___ Single Cyclone
___ Cyclone Bank
___ Settling Chamber
__X_ Other (describe) __Mist Eliminator_____
___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Oil Mist (PM)	50%	50%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Nominal 62,000 cfm system

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is not a major source uncontrolled and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions are completed as required in the permit. Pressure drop is also reviewed monthly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 010C201	**List all emission units associated with this control device.** Dust Transfer Station (010P201)	
Manufacturer: Wheelabrator Air Pollution Control Division	**Model number:** #810 WCC-36	**Installation date:** 1995

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	95%	99%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The baghouse is 26,000 ACFM with a filter area of 280 ft^2 and 80 filter elements. Each element has a volume of 325 and the system has a face velocity of 32.5 ft/min.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X__ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Source is not a major source uncontrolled and is therefore not subject to CAM.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure drop is monitored monthly.

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at http://www.epa.gov/ttn/emc/cam.html

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): ☐ YES ☒ NO

a. The PSEU is located at a major source that is required to obtain a Title V permit;

b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is NOT exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
- Stratospheric Ozone Protection Requirements.
- Acid Rain Program Requirements.
- Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
- An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).

c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;

d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND

e. The PSEU is NOT an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

☒ RENEWAL APPLICATION. **ALL** PSEUs for which a CAM plan has NOT yet been approved need to be addressed in this CAM plan submittal.

☐ INITIAL APPLICATION (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

☐ SIGNIFICANT MODIFICATION TO LARGE PSEUs. **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, Only address the appropriate monitoring requirements affected by the significant modification.

3) [a] BACKGROUND DATA AND INFORMATION					
Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU In order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.					
PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	[b] EMISSION LIMITATION or STANDARD	[c] MONITORING REQUIREMENT
EXAMPLE Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

[a] If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

[b] Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

[c] Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA			
Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. if more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.			
4a) PSEU Designation:	**4b) Pollutant:**	**4c) [a] Indicator No. 1:**	**4d) [a] Indicator No. 2:**
5a) GENERAL CRITERIA Describe the MONITORING APPROACH used to measure the indicators:			
[b] Establish the appropriate INDICATOR RANGE or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:			
5b) PERFORMANCE CRITERIA Provide the SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, such as detector location, installation specifications, and minimum acceptable accuracy:			
[c] For new or modified monitoring equipment, provide VERIFICATION PROCEDURES, including manufacturer's recommendations, TO CONFIRM THE OPERATIONAL STATUS of the monitoring:			
Provide QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):			
[d] Provide the MONITORING FREQUENCY:			
Provide the DATA COLLECTION PROCEDURES that will be used:			
Provide the DATA AVERAGING PERIOD for the purpose of determining whether an excursion or exceedance has occurred:			

[a] Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

[b] Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

[c] The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

[d] Emission units with post-control PTE ≥ 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:	6b) Regulated Air Pollutant:

7) **INDICATORS AND THE MONITORING APPROACH**: Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

8) **INDICATOR RANGES**: Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how **EACH** indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.

- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.

- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION:

Appendix B
Permit Shield Applicability

West Virginia Title V Applicability Review
For Permit Shield
Constellium Rolled Products, LLC

Citation	Description	Applicable		Explanation
		Yes	No	
45CSR1	NOx budget trading program as a means of control and reduction of NOx		X	Facility is not in the NOx trading program.
45CSR2	To prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers		X	Facility does not have indirect heat exchangers.
45CSR2A	Testing, monitoring, recordkeeping and reporting requirements under 45CSR2		X	Facility is not subject to 45CSR2.
45CSR3	To prevent and control air pollution from the operation of hot mix asphalt plants		X	Facility does not operate hot mix asphalt plants.
45CSR4	To prevent and control the discharge of air pollutants into the open air which causes or contributes to an objectionable odor or odors	X		General requirement.
45CSR5	To prevent and control the discharge of air pollutants from the operation of coal preparation plants, coal handling operations and coal refuse disposal areas		X	Facility does not operate a coal facility.
45CSR6	To prevent and control air pollution from combustion of refuse		X	Facility does not combust refuse.
45CSR7	To prevent and control PM air pollution from manufacturing processes and associated operations	X		Most of the equipment at the facility is subject to this regulation. The facility permit outlines the limits on each piece of equipment.
45CSR7A	Compliance test procedures for 45CSR7 – to prevent and control particulate air pollution from manufacturing process operations	X		Procedures are required to be used when demonstrating compliance with the requirements.
45CSR8	Ambient air quality standards for SO2 and PM	X		General requirement.
45CSR9	Ambient air quality standards for CO and ozone	X		General requirement.
45CSR10	To prevent and control air pollution from the emission of SO2	X		Requirement for fuel-burning sources. Alcan only uses natural gas so SO2 compliance is easily met.
45CSR10A	Testing, monitoring,	X		Must meet requirements as provided in

Citation	Description	Applicable		Explanation
		Yes	No	
	recordkeeping and reporting requirements under 45CSR10			**45CSR10.**
45CSR11	**Prevention of air pollution emergency episodes**	**X**		**General requirement that can be instituted by WV DEP is required.**
45CSR12	**Ambient air quality standard for NOx**			**General requirement.**
45CSR13	**Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, administrative updates, temporary permits, general permits, and procedures for evaluation**			**Facility is subject to this requirement for the installation of new stationary equipment. The facility has 45CSR13 permits fro some equipment on-site.**
45CSR13A	**The permitting of research and development (R&D) activities under 45CSR13**		**X**	**Facility does not have R&D facilities.**
45CSR13B	**The permitting of laboratory facilities under 45CSR13**	**X**		**Facility does have laboratory on-site to complete various test on the metal.**
45CSR14	**Permits for construction and major modification of major stationary sources of air pollution for the prevention of significant deterioration (PSD)**	**X**		**Facility is a major source for purposes of PSD. The facility has PSD avoidance requirements in the Title V permit.**
45CSR15	**Emission Standards for hazardous air pollutants (HAPs) pursuant to 40CFR Part 61**		**X**	**Facility is not subject to any 40CFR Part 61 requirements. See attached document for individual applicability.**
45CSR16	**Standards for performance new stationary sources pursuant to 40CFR Part 60**		**X**	**Facility is not subject to any 40CFR Part 60 requirements. See attached document for individual applicability**
45CSR17	**To prevent and control PM air pollution from materials handling, preparation, storage and other sources of fugitive PM**	**X**		**The facility does manage fugitive PM.**
45CSR18	**To prevent and control emissions from commercial and industrial solid waste incineration (CISWI) units**		**X**	**Facility does not operate a CISWI.**
45CSR19	**Requirements for pre-construction review, determination of emission offsets for proposed new or modified stationary sources of air pollutants**		**X**	**Facility is located in an attainment area.**

Citation	Description	Applicable		Explanation
		Yes	No	
	and emission trading for instrasource pollutants			
45CSR20	**Good engineering practice (GEP) as applicable to stack heights**	**X**		**Facility complies with all GEP requirements.**
45CSR21	**Regulation to prevent and control air pollution from the emission of VOCs**		**X**	**Facility is not located in an applicable county.**
45CSR22	**Air quality management fee program**	**X**		**Facility is subject as required during permitting exercises.**
45CSR23	**To prevent and control emissions from municipal solid waste landfills**		**X**	**Facility does not operate a municipal solid waste landfill.**
45CSR24	**To prevent and control emission from hospital/ medical/ infectious waste incinerators**		**X**	**Facility does not operate a hospital/ medical/ infectious waste incinerator./**
45CSR25	**To prevent and control air pollution from hazardous waste treatment, storage, or disposal facilities (TSDF)**		**X**	**Facility does not operate a TSDF.**
45CSR26	**NOx budget trading program as a means of control and reduction of NOx from electric generating units**		**X**	**Facility is not an electric generating unit.**
45CSR27	**To prevent and control emissions of toxic air pollutants**		**X**	**Facility does not emit these toxic pollutants and is not subject to the requirements.**
45CSR28	**Air pollutant emissions banking and trading**	**X**		**Facility has banked emissions from the removal of equipment.**
45CSR29	**Rule requiring the submission of emission statements for VOC emissions and NOx emissions**		**X**	**Facility is not located in an applicable county.**
45CSR30	**Requirements for operating permits**	**X**		**This is part of a renewal application for the facility Title V permit.**
45CSR30A	**Deferral of non-major and area sources from permitting requirements**		**X**	**Facility is a major source for Title V permitting.**
45CSR30B	**Identification and counting of fugitive emissions in major source determinations under WV 45CSR30**		**X**	**Requirement does not apply. Facility is a major source.**
45CSR31	**Confidential information**	**X**		**Facility will request confidential information.**
45CSR31A	**Release of previously**		**X**	**Facility is not requesting a release of any**

Citation	Description	Applicable		Explanation
		Yes	No	
	submitted confidential information			**previously submitted information.**
45CSR31B	**Confidential business information and emission data**	**X**		**Facility will request confidential information.**
45CSR32	**Serious and minor violations of applicable rules**	**X**		**Applicable as a general requirement. The facility presently has no consent decrees related to rule violations.**
45CSR33	**Acid rain provisions and permits**		**X**	**Facility does not have an aid rain permit and is not subject to the requirements.**
45CSR34	**Emission standards for HAPs for source categories pursuant to 40CFR Part 63**	**X**		**Facility is subject to a 40CFR Part 63 requirement. See the attached table to review individual requirement applicability.**
45CSR35	**Requirements for determining conformity of general federal actions to applicable air quality implementation plans (General Conformity)**	**X**		**General requirement.**
45CSR36	**Requirements for determining conformity of transportation plans, programs, and projects developed, funded or approved under Title 23 U.S.C. or the federal transit act, to applicable air quality implementation plans (Transportation Conformity)**	**X**		**General requirement.**
45CSR37	**Mercury budget trading program to reduce mercury emissions**		**X**	**Facility is not presently subject to the CAMR requirement.**
45CSR38	**Provisions for determination of compliance with air quality management rules**	**X**		**General requirement.**
45CSR39	**Control of annual NOx emissions to mitigate interstate transport of fine PM and NOx**		**X**	**Facility is not presently subject to the CAIR requirements.**
45CSR40	**Control of ozone season NOx emissions to mitigate interstate transport of ozone and NOx**		**X**	**Facility is not presently subject to the CAIR requirements.**
45CSR41	**Control of annual SO2 emissions to mitigate interstate transport of fine PM and SO2**		**X**	**Facility is not presently subject to the CAIR requirements.**

Federal Title V Applicability Review
For Permit Shield
Constellium Rolled Products, LLC

1. *NEW SOURCE PERFORMANCE REGULATIONS – 45CSR16*				
B. APPLICABILITY			**TITLE SUBPART**	**ORGANIZATION (40 CFR PART 60 NEW SOURCE PERFORMANCE STANDARDS)**
YES	**NO**	**REASON**		
	x		**A**	**General Provisions**
	x		**B**	**Adoption and Submittal of State Plans for Designated Facilities**
	x		**C**	**Emission Guidelines and Compliance Times**
	x		**Ca**	**Emission Guidelines and Compliance Times for Municipal Waste Combusters**
	x		**Cb**	**Emission Guidelines and Compliance Times for Municipal Waste Combusters that are Constructed on or before 12/19/95**
	x		**Cc**	**Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills**
	x		**Cd**	**Emission Guidelines and Compliance Times for Sulfuric Acid Productions Units**
	x		**Ce**	**Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators**
	x		**D**	**Fossil-Fuel Fired Steam Generators (construction started after 8/17/71)**
	x		**Da**	**Electric Utility Steam Generating Units(construction started after 9/18/78)**
	x		**Db**	**Industrial-Commercial-Institutional Steam Generating Units**
	x		**Dc**	**Small Industrial-Commercial-Institutional Steam Generating Units**
	x		**E**	**Incinerators**
	x		**Ea**	**Municipal Waste Combustors Constructed Between 12-20-89 / 9-20-94**
	x		**Eb**	**Municipal Waste Combustors After 9-20-94**
	x		**Ec**	**Hospital/Medical/Infectious Waste Incinerators Constructed After 6-20-96**
	x		**F**	**Portland Cement Plants**
	x		**G**	**Nitric Acid Plants**
	x		**H**	**Sulfuric Acid Plants**
	x		**I**	**Asphalt / Concrete Plants**
	x		**J**	**Petroleum Refineries**
	x		**K**	**Storage vessels for Petroleum Liquids which construction, reconstruction or Modification started between (6/11/73 – 5/19/78)**
	x		**Ka**	**Storage Vessels for Petroleum Liquids 5/19/78 – 7/23/84**
	x		**Kb**	**Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) after 7/23/84**
	x		**L**	**Secondary Lead Smelters**
	x		**M**	**Secondary Brass and Bronze Production Plants**
	x		**N**	**Primary Emissions from Basic Oxygen Process**

1. *NEW SOURCE PERFORMANCE REGULATIONS – 45CSR16*				
B. APPLICABILITY			**TITLE SUBPART**	**ORGANIZATION (40 CFR PART 60 NEW SOURCE PERFORMANCE STANDARDS)**
YES	**NO**	**REASON**		
				Furnaces(construction after 6/11/73
	x		**Na**	**Secondary Emissions from Basic Oxygen Process Steelmaking Facilities (Construction started after1/20/83)**
	x		**O**	**Sewage Treatment Plants**
	x		**P**	**Primary Copper Smelters**
	x		**Q**	**Primary Zinc Smelters**
	x		**R**	**Primary Lead Smelters**
	x		**S**	**Primary Aluminum Reduction Plants**
	x		**T**	**Phosphate Fertilizer Industry; Wet-Process Phosphoric Acid Plants**
	x		**U**	**Phosphate Fertilizer Industry; Superphosphoric Acid Plants**
	x		**V**	**Phosphate Fertilizer Industry; Diammonium Phosphate Plants**
	x		**W**	**Phosphate Fertilizer Industry; Triple Superphosphate Plants**
	x		**X**	**Phosphate Fertilizer Industry; Granular Triple Superphosphate Storage Facilities**
	x		**Y**	**Coal Preparation Plants**
	x		**Z**	**Ferroalloy Production Facilities**
	x		**AA**	**Steel Plants Electric Arc Furnaces (Constructed from 11/21/74 to 8/17/83)**
	x		**AAa**	**Steel Plants Electric Arc Furnaces and Argon-oxygen Decarburization Vessels (Constructed after 8/7/83)**
	x		**BB**	**Kraft Pulp Mills**
	x		**CC**	**Glass Manufacturing Plants**
	x		**DD**	**Grain Elevators**
	X		**EE**	**Surface Coating of Metal Furniture**

YES	**NO**	**REASON**		
	X		**FF**	**[Reserved]**
	X		**GG**	**Stationary Gas Turbines**
	X		**HH**	**Lime Manufacturing Plants**
	X		**KK**	**Lead-Acid Battery Manufacturing**
	X		**LL**	**Metallic Mineral Processing Plants**
	X		**MM**	**Automobile and Light-Duty Truck Surface Coating Operations**
	X		**NN**	**Phosphate Rock Plants**
	X		**PP**	**Ammonium Sulfate Manufacture**
	X		**QQ**	**Graphic Arts Industry; Publication Rotogravure Printing**
	X		**RR**	**Pressure Sensitive Tape and Label Surface Coating Operations**
	X		**SS**	**Industrial Surface Coating Large Appliances**
	X		**TT**	**Metal Coil Surface Coating**

	X		UU	Asphalt Processing and Asphalt Roofing Manufacture
	X		VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
	X		WW	Beverage Can Surface Coating Industry
	X		XX	Bulk Gasoline Terminals
	X		AAA	New Residential Wood Heaters
	X		BBB	Rubber Tire Manufacturing Industry
	X		CCC	[Reserved]
	X		DDD	Polymer Manufacturing Industry
	X		EEE	[Reserved]
	X		FFF	Flexible Vinyl and Urethane Coating and Printing
	X		GGG	Equipment Leaks of VOC in Petroleum Refineries
	X		HHH	Synthetic Fiber Production Facilities
	X		III	VOC Emissions from SOCMI Air Oxidation Unit Processes
	X		JJJ	Petroleum Dry Cleaners
	X		KKK	Equipment Leaks of VOC from Onshore Natural Gas Processing
	X		LLL	Onshore Natural Gas Processing-SO_2 Emissions
	X		MMM	[Reserved]
	X		NNN	VOC Emissions from SOCMI Distillation Operations
	X		OOO	Nonmetallic Mineral Processing Plants
	X		PPP	Wool Fiberglass Insulation Manufacturing Plants
	X		QQQ	VOC Emissions form Petroleum Refinery Wastewater Systems
	X		RRR	Synthetic Organic Chemical Manufacturing Reactor Processes
	X		SSS	Magnetic Tape Coating Facilities
	X		TTT	Industrial Surface Coating of Plastic Parts for Business Machines
	X		UUU	Calciners and Dryers in Mineral Industries
	X		VVV	Polymeric Coating of Supporting Substrates Facilities
	X		WWW	Landfills
	X		AAAA	Small Municipal Waste Combustion Units (started after 8/30/99, Modifications or Reconstruction after 6/6/01)
	X		CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for which Modification or Reconstruction is Commenced on or After June 1, 2001
	X		DDDD	Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units Constructed on or Before 11-30-99
	X		GGGG	[Reserved]
	X		HHHH	Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS – 45CSR34				
APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON	SUBPART	(40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES)
x		Facility is a major source of HAPs	A	General Provisions
	x		B	Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)
	x		F	Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry
	x		G	Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
	x		H	Organic Hazardous Air Pollutants for Equipment Leaks
	x		I	Organic Hazardous Air Pollutants for Certain Process Subject to the Negotiated Regulation for Equipment Leaks
	x		J	Polyvinyl Chloride Copolymers Production
	X		K	[Reserved]
	X		L	Coke Oven Batteries
	X		M	Perchloroethylene Air Emission for Dry Cleaning
	X		N	Chromium Emissions from Hard and Decorative Chromium Electroplating and from Chromium Anodizing Tanks
	X		O	Ethylene Oxide Emission for Sterilization Facilities
	X		P	[Reserved]
	X		Q	Hazardous Air Pollutants for Industrial Process Cooling Towers
	X		R	Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
	X		S	Hazardous Air Pollutants from the Pulp and Paper Industry
	X		T	Halogenated Solvent Cleaning
	X		U	Group I Polymers and Resins
	X		V	[Reserved]
	X		W	Epoxy Resins Production and Non-Nylon Polyamides Production
	X		X	Hazardous Air Pollutants from Secondary Lead Smelting
	X		Y	National Emission Standards for Marine Vessel Loading and Unloading Operations
	X		Z	[Reserved]
	X		AA	Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants
	X		BB	Hazardous Air Pollutants from Phosphate Fertilizer Production Plants
	X		CC	Hazardous Air Pollutants; Petroleum Refineries
	X		DD	Off-Site Waste and Recovery Operations
	X		EE	Magnetic Tape Manufacturing Operations
	X		FF	[Reserved]
	X		GG	Hazardous Air Pollutants for Source Categories: Aerospace Manufacturing and Rework Facilities

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS – 45CSR34				
APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON	SUBPART	(40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES)
	X		HH	Hazardous Air Pollutants from Oil and Natural Gas Production Facilities
	X		II	Hazardous Air Pollutants for Shipbuilding & Ship Repair (Surface Coating) Operations
	X		JJ	Hazardous Air Pollutant Emissions from Wood Furniture Manufacturing
	X		KK	Printing and Publishing Industry
	X		LL	Hazardous Air Pollutants for Primary Aluminum Reduction Plants
	X		MM	Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills
	X		OO	Tanks—Level 1
	X		PP	Containers
	X		QQ	Surface Impoundments
	X		RR	Individual Drain Systems
	X		SS	Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process
	X		TT	Equipment Leaks—Control Level 1
	X		UU	Equipment Leaks—Control Level 2 Standards
	X		VV	Oil Water Separators and Organic-Water Separators
	X		WW	Storage Vessels (tanks)—Control Level 2
	X		XX	Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations
	X		YY	Hazardous Air Pollutants for Source Categories: Generic Maximum Available Control Technology Standards
	X		ZZ	[Reserved]
	X		AAA	[Reserved]
	X		BBB	[Reserved]
	X		CCC	Steel Pickling HCl Process Facilities and Hydrochloric Acid Regeneration Plants
	X		DDD	Hazardous Air Pollutants for Mineral Wool Production
	X		EEE	Hazardous Air Pollutants from Hazardous Waste Combustors
	X		FFF	[Reserved]
	X		GGG	Pharmaceuticals Production
	X		HHH	Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities
	X		III	Hazardous Air Pollutants for Flexible Polyurethane Foam Production
	X		JJJ	Hazardous Air Pollutant Emissions: Group IV Polymers and Resins
	X		KKK	[Reserved]
	X		LLL	Hazardous Air Pollutants from the Portland Cement Manufacturing Industry
	X		MMM	Hazardous Air Pollutants for Pesticide Active Ingredient Production
	X		NNN	Hazardous Air Pollutants for Wool Fiberglass Manufacturing
	X		OOO	Manufacture of Amino/Phenolic Resins
	X		PPP	Hazardous Air Pollutant Emissions for Polyether Polyols Production
	X		QQQ	Primary Copper Smelting
x		Facility operates	RRR	Secondary Aluminum Production

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS – 45CSR34				
APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON	SUBPART	(40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES)
		equip that is subject to this regulation		
	X		SSS	[Reserved]
	X		TTT	Hazardous Air Pollutants for Primary Lead Smelting
	X		UUU	Petroleum Refineries:Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
	X		VVV	Hazardous Air Pollutants: Publicly Owned Treatment Works
	X		WWW	[Reserved]
	X		XXX	Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese
	X		AAAA	Municipal Solid Waste Landfills
	X		CCCC	Manufacturing of Nutritional Yeast
	X		DDDD	Plywood and Composite Wood Products
	X		EEEE	Organic Liquid Distribution (non-gasoline)
	X		FFFF	Miscellaneous Organic Chemical Manufacturing
	X		GGGG	Solvent Extraction for Vegetable Oil Production
	X		HHHH	Wet Formed Fiberglass Mat Production
	X		IIII	Automobile and Light Duty Truck Coating/Manufacturing
	X		JJJJ	Paper and Other Web Coating
	X		KKKK	Surface Coating of Metal Cans
	X		MMMM	Surface Coating of Miscellaneous Metal Parts and Products
	X		NNNN	Surface Coating of Large Appliances
	X		OOOO	Printing, Coating and Dyeing of Fabrics and Other Textiles
	X		PPPP	Surface Coating of Plastic Parts
	X		QQQQ	Surface Coating of Wood Building Products
	X		RRRR	Surface Coating of Metal Furniture
	X		SSSS	Surface Coating of Metal Coil
	X		TTTT	Leather Finishing Operations
	X		UUUU	Cellulose Production Manufacturing
	X		VVVV	Boat Manufacturing
	X		WWWW	Reinforced Plastic Composites Production
	X		XXXX	Rubber Tire Manufacturing
	X		YYYY	Combustion Turbines
X		Emergency Generators are subject	ZZZZ	Reciprocating Internal Combustion Engines (RICE)

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS – 45CSR34				
APPLICABILITY			TITLE SUBPART	ORGANIZATION (40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES)
YES	NO	REASON		
	X		AAAAA	Lime Manufacturing
	X		BBBBB	Semiconductor Manufacturing
	X		CCCCC	Coke Ovens: Pushing, Quenching and Battery Stacks
X		Indirect heaters are subject	DDDDD	Industrial, Commercial and Institutional Boilers and Process Heaters
	X		EEEEE	Iron Foundries
	X		FFFFF	Integrated Iron and Steel Manufacturing
	X		GGGGG	Site Remediation
	X		HHHHH	Miscellaneous Coating Manufacturing (MON)
	X		IIIII	Mercury Emissions from Mercury Cell Chlor-Alkali Plants
	X		JJJJJ	Brick and Structural Clay Products Manufacturing
	X		KKKKK	Clay Ceramics Manufacturing
	X		LLLLL	Asphalt Roofing and Processing
	X		MMMMM	Flexible Polyurethane Foam Fabrication Operations
	X		NNNNN	Hydrochloric Acid Production
	X		PPPPP	Engine Test Cells/Stands
	X		QQQQQ	Friction Parts Manufacturing
	X		RRRRR	Taconite Iron Ore Processing
	X		SSSSS	Refractory Products Manufacturing
	X		TTTTT	Primary Magnesium Refining
	X		UUUUU	Utility NESHAP
	X		WWWWW	Hospitals: Ethylene Oxide Sterilizers
	X		YYYYY	Electric Arc furnace Steelmaking (Area Sources)
	X		ZZZZZ	Iron & Steel Foundries (Area Sources)
	X		BBBBBB	Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (Area Sources)
	X		CCCCCC	Gasoline Dispensing Facilities (Area Sources)
	X		DDDDDD	Polyvinyl Chloride and copolymers Production (Area Sources)
	X		EEEEEE	Primary Copper Smelting (Area Sources)
	X		FFFFFF	Secondary Copper Smelting (Area Sources)
	X		GGGGGG	Primary Nonferrous Metals – Zinc, Cadmium, Beryllium (Area Sources)

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS – 45CSR34				
APPLICABILITY			TITLE SUBPART	ORGANIZATION (40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES)
YES	NO	REASON		
	X		HHHHHH	Paint Stripping and Miscellaneous Surface Coating operations
	X		JJJJJJ	Industrial, Commercial and Institutional Boiler and Process Heaters (Area Sources)
	X		LLLLLL	Acrylic/Modacrylic fiber (Area Sources)
	X		MMMMMM	Carbon Black Production (Area Sources)
	X		NNNNNN	Chromium Compounds (Area Sources)
	X		OOOOOO	Flexible Polyurethane Foam Production and Fabrication (Area Sources)
	X		PPPPPP	Lead Acid Battery Mfg. (Area Sources)
	X		QQQQQQ	Wood Preserving (Area Sources)
	X		RRRRRR	Clay Ceramic Manufacturing (Area Sources)
	X		SSSSSS	Glass Manufacturing (Area Sources)
	X		TTTTTT	Secondary Nonferrous Metals Processing (Brass, Bronze, Magnesium, & Zinc) (Area Sources)
	X		VVVVVV	Chemical Manufacturing Industry (Area Sources)
	X		WWWWWW	Plating & Processing Operations (Area Sources)
	X		XXXXXX	Metal Fabrication and Finishing Sources Source Nine Categories (Area Sources)
	X		YYYYYY	Ferroalloys Production (Area Sources)
	X		ZZZZZZ	Nonferrous Foundries: Aluminum, Copper, and Other (Area Sources)
	X		BBBBBB	Chemical Preparations Industry (Area Sources)
	X		EEEEEE	Gold mine Ore Processing and Production Area Sources)

EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS – 45CSR15				
C. APPLICABILITY			TITLE SUBPART	ORGANIZATION (40 CFR PART 61 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS)
YES	NO	REASON		
	x		A	General Provisions
	x		B	Radon Emissions from Underground Uranium Mines
	x		C	Beryllium
	x		D	Beryllium Rocket Motor Firing
	x		E	Mercury
	x		F	Vinyl Chloride
	x		G	[Reserved]
	x		H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities
	x		I	Radionuclides Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H
	x		J	Equipment Leaks (Fugitive Emission Sources) of Benzene
	x		K	Radionuclide Emission from Elemental Phosphorous Plants
	x		L	Benzene Emissions from Coke By-Products Recovery Plants
	x		M	Asbestos
	x		N	Inorganic Arsenic Emissions from Glass Manufacturing Plants
	x		O	Inorganic Arsenic Emissions from Primary Copper Smelters
	x		P	Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities
	x		Q	Radon Emissions from Department of Energy Facilities
	x		R	Radon Emissions from Phosphogypsum
	x		S	[Reserved]
	x		T	Radon Emissions from the Disposal of Uranium Mill Tailings
	x		U	[Reserved]
	x		V	Equipment Leaks (Fugitive Emission Sources)
	x		W	Radon Emissions from Operating Mill Tailings
	x		X	[Reserved]
	x		Y	Benzene Emissions from Benzene Storage Vessels
	x		Z	[Reserved]
	x		AA	[Reserved]
	x		BB	Benzene Emissions from Benzene Transfer Operations
	X		CC	[Reserved]
	X		DD	[Reserved]
	X		EE	[Reserved]
	X		FF	Benzene Waste Operations

Attachment S

Title V Permit Revision Information

1. New Applicable Requirements Summary

Mark all applicable requirements associated with the changes involved with this permit revision:

☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR15)	☐ Nonattainment NSR (45CSR19)
☐ Section 111 NSPS (Subpart(s)_____)	☐ Section 112(d) MACT standards (Subpart(s)_RRR_____)
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☐ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ Compliance Assurance Monitoring (40CFR64) [(1)]
☐ NO_x Budget Trading Program Non-EGUs (45CSR1)	☐ NO_x Budget Trading Program EGUs (45CSR26)

[(1)] If this box is checked, please include **Compliance Assurance Monitoring (CAM) Form(s)** for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application). If this box is not checked, please explain why **Compliance Assurance Monitoring** is not applicable:

2. Non Applicability Determinations

List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination.

Please Reference the Permit Shield Document in Appendix B

☒ **Permit Shield Requested** *(not applicable to Minor Modifications)*

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

3. Suggested Title V Draft Permit Language

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision? ☐ Yes ☒ No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

Process Weight Rate Limit – PM<32.0 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1, 5.4.2)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
R13-2376D	06/24/2015	
	/ /	
	/ /	

5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
	MM/DD/YYYY	
	/ /	
	/ /	

6. Change in Potential Emissions	
Pollutant	Change in Potential Emissions (+ or -), TPY
Carbon Monoxide (CO)	16.5
Nitrogen Oxides (NO_X)	25
Lead (Pb)	5E-7
Particulate Matter ($PM_{2.5}$)	1.63
Particulate Matter (PM_{10})	1.63
Total Particulate Matter (TSP)	1.63
Sulfur Dioxide (SO_2)	0.13
Volatile Organic Compounds (VOC)	1.18

7. Certification For Use Of Minor Modification Procedures *(Required Only for Minor Modification Requests)*

Note:	*This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows:*

i. Proposed changes do not violate any applicable requirement;

ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;

iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;

v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;

vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.

Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.

(Signed):	*(Please use blue ink)*	Date:	/ / *(Please use blue ink)*
Named (typed):	*Lloyd A. Stemple*	Title:	*CEO*

Note: Please check if the following included (if applicable):

☐	Compliance Assurance Monitoring Form(s)
☒	Suggested Title V Draft Permit Language

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Melting Furnace DC-1	005P107	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1970		
Melting Furnace DC-2	005P108	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1986		
Melting Furnace DC-3	005P109	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1950s		
Melting Furnace DC-5	005P111	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1950s		
Melting Furnace DC-6	005P112	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1950s		
Melting Furnace DC-7	005P113	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1960s		
Melting Furnace DC-8	005P114	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1960s		
Melting Furnace DC-9B	005P116	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying.	1978		
Holding Furnace 1	005P117	Molten aluminum alloying	1970		
Holding Furnace 2	005P118	Molten aluminum alloying	1986		

Holding Furnace 3	005P119	Molten aluminum alloying	1950s		
Holding Furnace 5	005P121	Molten aluminum alloying	1950s		Baghouse 4
Holding Furnace 6	005P122	Molten aluminum alloying	1950s		
Holding Furnace 7	005P123	Molten aluminum alloying	1960s		Baghouse 4
Holding Furnace 8	005P124	Molten aluminum alloying	1960s		Baghouse 4
Holding Furnace 9	005P125	Molten aluminum alloying	1978		Baghouse 4
Melting Furnace DC-10A	005P139	Melts fabrication scrap, purchased aluminum, and molten aluminum alloying	2001		
Melting Furnace DC-10B	005P149	Molten aluminum alloying	2001		
Holding Furnace 10	005P141	Molten aluminum alloying	2001		Baghouse 4

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Ingot Pusher Furnace	006P102	Aluminum ingot heating	2017		
27 Heat Soaking Pits (337)	006P105	Aluminum ingot heating	1958		
168 Inch Hot Mill (351)	006P107	Forming of aluminum sheet	1958		
4 Reheat Furnaces	006P109	Reheating of aluminum sheet	1958		
110 Inch Hot Mill (355)	006P110	Aluminum sheet processing	1958		
5-Stand Hot Mill (361)	006P113	Aluminum sheet processing	1958		
Ingot Pusher	006P119	Aluminum ingot heating	1998		
Preheat Furnace	006P120	Aluminum ingot heating	2003		

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
72 inch Single Stand Cold Mill (384)	007P101	Aluminum Sheet Processing	1975		Demister (003C101)
72 inch Tandem Stand Cold Mill (382)	007P102	Aluminum Sheet Processing	1971		Demister (003C102)
130 inch Single Stand Cold Mill (386)	007P103	Aluminum Sheet Processing	1971		Cyclone (003C104)
5-Stand Cold Mill (381)	007P105	Aluminum Sheet Processing	1975		Demister (003C103)
Cold Roll Annealing Furnaces	007P107	Heat Treating	1971		

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Salem 12 Zone Heat Treat Furnace (373)	008P102	Heat treating of aluminum plate	1960		
144 inch Plate Mill (371)	008P103	Aluminum plate processing	1960		
120 foot Aging Furnace (340)	008P104	Heat treating of aluminum plate	1971		
60 foot Aging Furnace	008P105	Heat treating of aluminum plate	1971		
Horizontal Heat Treat Furnace	008P110	Heat treating of aluminum plate	1998		
Horizontal Heat Treat Furnace Addition	008P112	Heat treating of aluminum plate	2003		
Horizontal Heat Treat Furnace Addition #2	008P113	Heat treating of aluminum plate	2006		
Aging Furnace	008P111	Heat treating of aluminum plate	2001		
Aging Furnace #2	008P114	Heat treating of aluminum plate	2006		

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Coil Annealing Furnaces (413)	009P103	Heat treating of aluminum coil	1971		
Coil Annealing Furnaces (521)	009P104	Heat treating of aluminum coil	1971		
66 inch Coil Processing Line (527)	009P109	Cutting, trimming, and leveling of aluminum coil	1966		
120 inch wide Level Line (575)	009P110	Cutting, trimming, and leveling of aluminum coil	1972		
Cut to Length Line (511)	009P111	Cutting of aluminum sheet into pieces	1972		

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Dust Handling System	010P201	Management of baghouse dust	1995		Baghouse R-2 (006C201)
Waukesha	010P201	Emergency Pager	1950's		
John Deere	010P202	Emergency Fire Pump	2001-2002		
Generac	010P203	Emergency Phone System	2009 (New – NSPS)		
Ford	010P204	Emergency Deep Well Engine	1980's		
Ford	010P205	Emergency Deep Well Engine	1980's		
Mersino	010P206	Non-Emergency WWT Feed Tanks	2012 (New – NSPS)		
Cummins	010P207	Emergency –Computer Building	2014 (New – NSPS)		

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P107	Melting Furnace DC-1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Sunbeam Engineering Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1960s	1960s	1970

Design Capacity (examples: furnaces – tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 42 MMBtu/hr	**Type and Btu/hr rating of burners:** 4 burners @10.5 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 41,176 SCF/hr – Annual = 333.60 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.46	14.26
Nitrogen Oxides (NO_X)	5.76	23.77
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	3.47	15.22
Particulate Matter (PM_{10})	3.47	15.22
Total Particulate Matter (TSP)	7.02	30.79
Sulfur Dioxide (SO_2)	0.025	0.1
Volatile Organic Compounds (VOC)	0.23	0.93
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test and AP-42 data

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P108	Melting Furnace DC-2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	1986

Design Capacity (examples: furnaces - tons/hr, tanks – gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 42 MMBtu/hr	**Type and Btu/hr rating of burners:** 4 burners @10.5 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 41,176 SCF/hr – Annual = 339.60 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg	Neg	1020 BTU/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.46	14.26
Nitrogen Oxides (NO_X)	5.76	23.77
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	3.47	15.22
Particulate Matter (PM_{10})	3.47	15.22
Total Particulate Matter (TSP)	7.02	30.79
Sulfur Dioxide (SO_2)	0.025	0.1
Volatile Organic Compounds (VOC)	0.23	0.93

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.1)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<25 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P109	Melting Furnace DC-3	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces – tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 32.1 MMBtu/hr	**Type and Btu/hr rating of burners:** 3 burners @ 10.7 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas- Hourly = 31,471 SCF/hr – Annual = 255.60 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 BTU/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.64	10.74
Nitrogen Oxides (NO_X)	4.41	17.89
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	2.38	10.403
Particulate Matter (PM_{10})	2.38	10.403
Total Particulate Matter (TSP)	4.80	21.029
Sulfur Dioxide (SO_2)	0.019	0.08
Volatile Organic Compounds (VOC)	0.17	0.70

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl		

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Operate as a Group 2 Furnace (40CFR63 Subpart RRR)(Title V Condition 4.1.25, 4.2.12, 4.4.1, 4.4.6)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.4.4) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month (Title V Condition 4.4.1)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Operate as a Group 2 Furnace/Monitor (40CFR63 Subpart RRR)(Title V Condition 4.1.25, 4.2.12, 4.4.1, 4.4.6) – Compliance demonstrated by monitoring feedstock, maintain records, submit semi-annual and annual reports.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P111	Melting Furnace DC-5	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 32.1 MMBtu/hr	**Type and Btu/hr rating of burners:** 3 burners @ 10.7 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 31,471 SCF/hr – Annual = 255.60 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg	Neg	1020 BTU/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.64	10.74
Nitrogen Oxides (NO_X)	4.41	17.89
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	2.38	10.40
Particulate Matter (PM_{10})	2.38	10.40
Total Particulate Matter (TSP)	4.80	21.03
Sulfur Dioxide (SO_2)	0.019	0.08
Volatile Organic Compounds (VOC)	0.17	0.07

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl		

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Operate as a Group 2 Furnace (40CFR63 Subpart RRR)(Title V Condition 4.1.25, 4.2.12, 4.4.1, 4.4.6)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.4.4) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month (Title V Condition 4.4.1)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Operate as a Group 2 Furnace, Monitor (40CFR63 Subpart RRR)(Title V Condition 4.1.25, 4.2.12, 4.4.1, 4.4.6) – Compliance demonstrated by monitoring feedstock, maintain records, submit semi-annual and annual reports.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P112	Melting Furnace DC-6	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces – tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 32.1 MMBtu/hr	**Type and Btu/hr rating of burners:** 3 burners @ 10.7 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 31,471 SCF/hr – Annual = 254.40 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.64	10.68
Nitrogen Oxides (NO_X)	4.41	17.81
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	2.38	10.40
Particulate Matter (PM_{10})	2.38	10.40
Total Particulate Matter (TSP)	4.80	21.03
Sulfur Dioxide (SO_2)	0.02	0.08
Volatile Organic Compounds (VOC)	0.17	0.70

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl		

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.4.4) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month (Title V Condition 4.4.1)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Operate as a Group 2 Furnace, Monitor (40CFR63 Subpart RRR)(Title V Condition 4.1.25, 4.2.12, 4.4.1, 4.4.6) – Compliance demonstrated by monitoring feedstock, maintain records, submit semi-annual and annual reports.

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.4.4) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month (Title V Condition 4.4.1)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Operate as a Group 2 Furnace, Monitor (40CFR63 Subpart RRR)(Title V Condition 4.1.25, 4.2.12, 4.4.1, 4.4.6) – Compliance demonstrated by monitoring feedstock, maintain records, submit semi-annual and annual reports.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P113	Melting Furnace DC-7	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Sunbeam Engineering Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1960s	1960s	2003

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X__Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 40 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burners @ 20MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 39,216 SCF/hr – Annual = 319.20 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.29	13.41
Nitrogen Oxides (NO_X)	5.49	22.34
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	3.48	15.23
Particulate Matter (PM_{10})	3.48	15.23
Total Particulate Matter (TSP)	7.03	30.77
Sulfur Dioxide (SO_2)	0.02	0.10
Volatile Organic Compounds (VOC)	0.22	0.88
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See SAPU MACT	See SAPU MACT
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.1)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P114	Melting Furnace DC-8	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Sunbeam Engineering Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1960s	1960s	2003

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
125,000 lb

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
30,000 lb/hr	118,800 tpy	24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:** 4 burner @ 10.5 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 41,176 SCF/hr – Annual = 319.20 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.46	13.41
Nitrogen Oxides (NO_X)	5.76	22.34
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	3.43	15.01
Particulate Matter (PM_{10})	3.43	15.01
Total Particulate Matter (TSP)	6.97	30.55
Sulfur Dioxide (SO_2)	0.03	0.10
Volatile Organic Compounds (VOC)	0.23	0.88

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.1)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P116	Melting Furnace DC-9B	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap. Purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell Dressler	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1978	1978	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X__Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 42 MMBtu/hr	**Type and Btu/hr rating of burners:** 4 burners @ 10.5 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 41,176 SCF/hr – Annual = 159.60 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.46	6.70
Nitrogen Oxides (NO_X)	5.76	11.17
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	1.83	8.00
Particulate Matter (PM_{10})	1.83	8.00
Total Particulate Matter (TSP)	3.65	16.01
Sulfur Dioxide (SO_2)	0.03	0.05
Volatile Organic Compounds (VOC)	0.23	0.44

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<25.9 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.1)
HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Natural Gas limited to 456 mmcf per year (45CSR13) (TV Permit Condition 4.1.28)
Production limited to 157, 800 tpy (45CSR13) (TV Permit Condition 4.1.30)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Emission Limits –PM=3.2 lb/hr & 14.02 tpy, HCl=6.8 lb/hr & 29.79 tpy, SO2=0.04 lb/hr & 0.18 tpy, NOx=5.0 lb/hr & 21.9 tpy, CO = 4.37 lb/hr & 19.15 tpy, VOC=0.29 lb/hr & 1.28 tpy –(45CSR13)(Construction Permit R13-0383)(Title V Condition 4.1.15)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<25.9 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month.(Title V Condition 4.4.4)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Natural Gas limited to 456 mmcf per year (45CSR13) (TV Permit Condition 4.1.28) – Compliance demonstrated by gas usage records.

Production limited to 157, 800 tpy (45CSR13) (TV Permit Condition 4.1.30) – Compliance demonstrated by production records.

Emission Limits –PM=3.2 lb/hr & 14.02 tpy, HCl=6.8 lb/hr & 29.79 tpy, SO2=0.04 lb/hr & 0.18 tpy, NOx=5.0 lb/hr & 21.9 tpy, CO = 4.37 lb/hr & 19.15 tpy, VOC=0.29 lb/hr & 1.28 tpy –(45CSR13)(Construction Permit R13-0383)(Title V Condition 4.1.15)- Compliance is demonstrated by mass balance emission calculations.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years.(Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P117	Holding Furnace 1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Sunbeam Engineering Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1960s	1960s	1970

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___X_Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burners @ 3 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 5,882 SCF/hr – Annual = 47.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0.49	2.01	
Nitrogen Oxides (NO_X)	0.82	3.34	
Lead (Pb)	Neg.	Neg.	
Particulate Matter ($PM_{2.5}$)	1.57	6.88	
Particulate Matter (PM_{10})	1.57	6.88	
Total Particulate Matter (TSP)	3.16	13.84	
Sulfur Dioxide (SO_2)	0.004	0.01	
Volatile Organic Compounds (VOC)	0.03	0.13	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
HCl	See MACT SAPU	See MACT SAPU	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P118	Holding Furnace 2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	1986

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
100,000 lb

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burner @ 3 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 5,882 SCF/hr – Annual = 47.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.49	2.01
Nitrogen Oxides (NO_X)	0.82	3.34
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	1.57	6.88
Particulate Matter (PM_{10})	1.57	6.88
Total Particulate Matter (TSP)	3.16	13.84
Sulfur Dioxide (SO_2)	0.004	0.01
Volatile Organic Compounds (VOC)	0.03	0.13

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P119	Holding Furnace 3	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 8 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burners @ 4 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 7,843 SCF/hr – Annual = 47.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.66	2.01
Nitrogen Oxides (NO_X)	1.10	3.34
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.65	2.83
Particulate Matter (PM_{10})	0.65	2.83
Total Particulate Matter (TSP)	1.28	5.59
Sulfur Dioxide (SO_2)	0.01	0.01
Volatile Organic Compounds (VOC)	0.04	0.13

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Baghouse 4
005P121	Holding Furnace 5	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
60,000 lb

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 8 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burners @ 4 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 7,843 SCF/hr – Annual = 47.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.66	2.01
Nitrogen Oxides (NO_X)	1.10	3.34
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.67	0.36
Particulate Matter (PM_{10})	0.67	0.36
Total Particulate Matter (TSP)	1.30	0.55
Sulfur Dioxide (SO_2)	0.01	0.01
Volatile Organic Compounds (VOC)	0.04	0.13

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.75 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P122	Holding Furnace 6	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 8 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burners @ 4 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 7,843 SCF/hr – Annual = 71.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.66	3.01
Nitrogen Oxides (NO_X)	1.10	5.02
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.67	2.92
Particulate Matter (PM_{10})	0.67	2.92
Total Particulate Matter (TSP)	1.30	5.68
Sulfur Dioxide (SO_2)	0.005	0.02
Volatile Organic Compounds (VOC)	0.04	0.20
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<16.83 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours operated in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P123	Holding Furnace 7	Baghouse 4 (001C105)

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1950s	1950s	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 5.3 MMBtu/hr	**Type and Btu/hr rating of burners:** 1 burner @ 5.3 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 5,196 SCF/hr – Annual = 47.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0.44	2.01	
Nitrogen Oxides (NO_X)	0.73	3.34	
Lead (Pb)	Neg.	Neg.	
Particulate Matter ($PM_{2.5}$)	0.07	0.3	
Particulate Matter (PM_{10})	0.07	0.3	
Total Particulate Matter (TSP)	0.11	0.5	
Sulfur Dioxide (SO_2)	0.003	0.01	
Volatile Organic Compounds (VOC)	0.03	0.13	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
HCl	See MACT SAPU	See MACT SAPU	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours operated in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P124	Holding Furnace 8	Baghouse 4 (001C105)

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell-Dressler Corp. Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1960s	1960s	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 5.3 MMBtu/hr	**Type and Btu/hr rating of burners:** 1 burner @ 5.3 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 5,196 SCF/hr – Annual = 47.76 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.44	2.01
Nitrogen Oxides (NO_X)	0.73	3.34
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.07	0.3
Particulate Matter (PM_{10})	0.11	0.3
Total Particulate Matter (TSP)	0.03	0.5
Sulfur Dioxide (SO_2)	0.003	0.01
Volatile Organic Compounds (VOC)	0.03	0.13

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<20.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours operated in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<420 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Baghouse 4 (001C105)
005P125	Holding Furnace 9	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Swindell Dressler	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1978	1978	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 10.6 MMBtu/hr	**Type and Btu/hr rating of burners:** 1 burner @ 10.6 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 10,392 SCF/hr – Annual = 119.52 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.87	5.02
Nitrogen Oxides (NO_X)	1.45	8.37
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.16	0.7
Particulate Matter (PM_{10})	0.16	0.7
Total Particulate Matter (TSP)	0.30	1.3
Sulfur Dioxide (SO_2)	0.006	0.04
Volatile Organic Compounds (VOC)	0.06	0.33
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<31.92 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Natural gas limited to 93 mmcf per year (45CSR13) (Title V Permit Condition 4.1.29)
Production limited to 315,600 tpy (45CSR13) (Title V Condition 4.1.31)
Emissions must by controlled by baghouse 4 (45CSR13) (40CFR Subpart RRR) (Title V Condition 4.1.32)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)
Emission Limits –PM=0.9 lb/hr & 3.95 tpy, HCl=2.3 lb/hr & 10.08 tpy, SO2=0.01 lb/hr & 0.03 tpy, CO = 0.89 lb/hr & 3.9 tpy, NOx=1.49 lb/hr & 6.5 tpy, VOC=0.06 lb/hr & 0.26 tpy –(45CSR13)(Construction Permit R13-0383)(Title V Condition 4.1.15)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the holding furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<31.92 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours operated in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Natural gas limited to 93 mmcf per year (45CSR13) (TV Permit Condition 4.1.29)- Compliance demonstrated by Natural Gas usage records.

Production limited to 315,600 tpy (45CSR13) (Title V Condition 4.1.31)-Compliance demonstrated by production records.

Emissions must by controlled by baghouse 4 (45CSR13) (40CFR Subpart RRR) (Title V Condition 4.1.32)-Compliance demonstrated by continuous operation of baghouse.

Emission Limits –PM=0.9 lb/hr & 3.95 tpy, HCl=2.3 lb/hr & 10.08 tpy, SO2=0.01 lb/hr & 0.03 tpy, CO = 0.89 lb/hr & 3.9 tpy, NOx=1.49 lb/hr & 6.5 tpy, VOC=0.06 lb/hr & 0.26 tpy –(45CSR13)(Construction Permit R13-0383)(Title V Condition 4.1.15) - Compliance is demonstrated using stack test data and AP-42 emission factors.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6,)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the holding furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P139	Melting Furnace DC-10A	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap, purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Brickmont		
Construction date:	**Installation date:**	**Modification date(s):**
2001	2001	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	)	24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 90.4 MMBtu/hr	**Type and Btu/hr rating of burners** 4 burners @ 22.6 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 88,627 SCF/hr – Annual = 743.5 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	7.44	31.23	
Nitrogen Oxides (NO_X)	12.41	18.59	
Lead (Pb)	Neg.	Neg.	
Particulate Matter ($PM_{2.5}$)	0.39	1.70	
Particulate Matter (PM_{10})	0.39	1.70	
Total Particulate Matter (TSP)	0.64	2.80	
Sulfur Dioxide (SO_2)	0.053	0.22	
Volatile Organic Compounds (VOC)	0.49	2.04	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
HCl	See MACT SAPU	See MACT SAPU	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<15.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.1)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)

Furnace should be installed, maintained and operated to minimize fugitive emissions. Additionally, the source cannot exceed the MDHI of 70 MMBtu/hr and only use natural gas. (45CSR13, R13-2376C, Condition A.1.)(Title V Permit Condition 4.1.3)

Maximum hourly and annual emission rates from the furnace cannot exceed the following: (Hourly Limits)- TSP=3.12 lb.hr, PM-10=1.53 lb/hr, CO=4.9 lb/hr, NOx=5.6 lb/hr, SOx=0.04 lb/hr, VOC=0.38 lb/hr, HCl=35.43 lb/hr (within the SAPU); (Annual Limits) – TSP=9.58 tpy, PM10=4.69 tpy, CO=13.72 tpy, NOx=15.68 tpy, SOx=0.12 tpy, VOC=1.06 tpy, HCl= 108.33 tpy (within the SAPU) (45CSR 13, R13-2376C, Condition A.2.)(Title V Permit Condition 4.1.4)

DC-10A shall be equipped with Regenerative Low-NOx burners (45CSR13, R13-2376C, Condition A.3.)(Title V Permit Condition 4.1.5)

DC-10A shall not consume more than 743,500,000 ft^3of gas (in conjunction with DC10B) (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 4.1.9)

The DC-10 Complex (DC10A, 10B, and HF10) shall not exceed 41.67 tons/hr and an annual throughput of 255,500 tons. Compliance with the hourly can be demonstrated by taking the daily throughput and dividing by hours of operation for the day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.1.10.)

Average emission rate of TSP and PM10 over one batch shall not exceed the following: TSP=0.15 lb/ton & PM10=0.0735 lb/ton. (45CSR13, R13-2376C, Condition A.10.)(Title V Permit Condition 4.1.12)

Emission rate of NOx shall not exceed the following; NOx=0.08 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 4.1.13.)

Emission rate of HCl shall not exceed the following (as measured downstream of any particulate control device); HCl=0.72 lb/ton (45CSR13, R13-2376C, Condition A.13.)(Title V Permit Condition 4.1.14)

Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

A performance test shall be completed once every 5 years for PM, HCl, and D/F for the furnace. Testing of representative furnaces is allowed. (40CFR63, Subpart RRR)

An initial performance test must be completed for HCL, PM, and D/F within 60 days of start-up but no later than 180 days after installation. Additionally, at such times thereafter, the permittee shall conduct or have conducted performance tests which will demonstrate compliance with TSP and PM10 emission limits as set forth in Condition 4.1.12, NOx emission limits as set for in Condition 4.1.13, and compliance with the maximum stack gas concentration limit of 210 mg/m^3 at standard conditions as set forth in Condition 4.1.2 of this permit. (45 CSR13, R13-2376C, Condition A.14.)(Title V Condition 4.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<15.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Furnace should be installed, maintained and operated to minimize fugitive emissions. Additionally, the source cannot exceed the MDHI of 70 MMBtu/hr and only use natural gas. (45CSR13, R13-2376C, Condition A.1.)

Maximum hourly and annual emission rates from the furnace cannot exceed the following: (Hourly Limits)- TSP=3.12 lb.hr, PM-10=1.53 lb/hr, CO=4.9 lb/hr, NOx=5.6 lb/hr, SOx=0.04 lb/hr, VOC=0.38 lb/hr, HCl=35.43 lb/hr (within the SAPU); (Annual Limits) – TSP=9.58 tpy, PM10=4.69 tpy, CO=13.72 tpy, NOx=15.68 tpy, SOx=0.12 tpy, VOC=1.06 tpy, HCl= 108.33 tpy (within the SAPU) (45CSR 13, R13-2376C, Condition A.2.) –Compliance is demonstrated using stack test data and emission calculations w/ AP-42 emission factors.

DC-10A shall be equipped with Regenerative Low-NOx burners (45CSR13, R13-2376C, Condition A.3.)(Title V Permit Condition 4.1.5) Compliance is demonstrated with design drawings.

DC-10A shall not consume more than 743,500,000 ft^3of gas (in conjunction with DC10B) (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 4.1.9) Compliance is demonstrated through the maintaining of certified daily and monthly records of the amount of natural gas consumed on a monthly basis and the daily and average hourly charge/feed rates (45CSR13, R13-2376C, Condition B.10)(Title V Permit Condition 4.4.8.).

The DC-10 Complex (DC10A, 10B, and HF10) shall not exceed 41.67 tons/hr and an annual throughput of 255,500 tons. Compliance with the hourly can be demonstrated by taking the daily throughput and dividing by hours of operation for the day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.1.10.) Compliance is demonstrated through the maintaining of certified daily and monthly records of the amount of natural gas consumed on a monthly basis and the daily and average hourly charge/feed rates (45CSR13, R13-2376C, Condition B.10)(Title V Permit Condition 4.4.8). Compliance with the annual aluminum charge throughput limit shall be determined using a yearly total. "Average hourly throughput" shall mean the daily throughput divided by the hours of operation for that day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.4.9.)

Average emission rate of TSP and PM10 over one batch shall not exceed the following: TSP=0.15 lb/ton & PM10=0.0735 lb/ton. (45CSR13, R13-2376C, Condition A.10.)(Title V Permit Condition 4.1.12) – Compliance is demonstrated using stack test data.

Emission rate of NOx shall not exceed the following; NOx=0.08 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 4.1.13.) – Compliance is demonstrated using stack test data.

Emission rate of HCl shall not exceed the following (as measured downstream of any particulate control device); HCl=0.72 lb/ton (45CSR13, R13-2376C, Condition A.13.)(Title V Permit Condition 4.1.14) – Compliance is demonstrated using stack test data and MACT compliance information.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day,

24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

A performance test shall be completed once every 5 years for PM, HCl, and D/F for the furnace. Testing of representative furnaces is allowed. (40CFR63, Subpart RRR) Initial testing has been completed and compliance with the 5 year testing is completed at the facility on a defined schedule to stay within the 5 year requirements.

An initial performance test must be completed for HCL, PM, and D/F within 60 days of start-up but no later than 180 days after installation. Additionally, at such times thereafter, the permittee shall conduct or have conducted performance tests which will demonstrate compliance with TSP and PM10 emission limits as set forth in Condition 4.1.12, NOx emission limits as set for in Condition 4.1.13, and compliance with the maximum stack gas concentration limit of 210 mg/m^3 at standard conditions as set forth in Condition 4.1.2 of this permit. (45 CSR13, R13-2376C, Condition A.14.)(Title V Condition 4.3) MACT initial testing was completed. Additionally, testing for TSP, PM10 and NOx were completed to demonstrate compliance with the applicable regulations. Testing was performed in compliance with Title V Permit Conditions 4.3.5 and 4.3.6.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005P140	Melting Furnace DC-10B	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Melts fabrication scrap, purchased aluminum, and molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Brickmont	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
2001	2001	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 90.4 MMBtu/hr	**Type and Btu/hr rating of burners:** 4 burners @ 22.6 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 88,627 SCF/hr – Annual = 743.5 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	7.44	31.23
Nitrogen Oxides (NO_X)	12.41	18.59
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.39	1.70
Particulate Matter (PM_{10})	0.39	1.70
Total Particulate Matter (TSP)	0.64	2.80
Sulfur Dioxide (SO_2)	0.05	0.22
Volatile Organic Compounds (VOC)	0.49	2.04

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<15.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.1)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)

Furnace should be installed, maintained and operated to minimize fugitive emissions. Additionally, the source cannot exceed the MDHI of 70 MMBtu/hr and only use natural gas. (45CSR13, R13-2376C, Condition A.1.)(Title V Permit Condition 4.1.3)

Maximum hourly and annual emission rates from the furnace cannot exceed the following: (Hourly Limits)- TSP=3.12 lb.hr, PM-10=1.53 lb/hr, CO=4.9 lb/hr, NOx=5.6 lb/hr, SOx=0.04 lb/hr, VOC=0.38 lb/hr, HCl=35.43 lb/hr (within the SAPU); (Annual Limits) – TSP=9.58 tpy, PM10=4.69 tpy, CO=13.72 tpy, NOx=15.68 tpy, SOx=0.12 tpy, VOC=1.06 tpy, HCl= 108.33 tpy (within the SAPU) (45CSR 13, R13-2376C, Condition A.2.)(Title V Permit Condition 4.1.4)

DC-10A shall be equipped with Regenerative Low-NOx burners (45CSR13, R13-2376C, Condition A.3.)(Title V Permit Condition 4.1.5)

DC-10A shall not consume more than 743,500,000 ft^3of gas (in conjunction with DC10B) (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 4.1.9)

The DC-10 Complex (DC10A, 10B, and HF10) shall not exceed 41.67 tons/hr and an annual throughput of 255,500 tons. Compliance with the hourly can be demonstrated by taking the daily throughput and dividing by hours of operation for the day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.1.10.)

Average emission rate of TSP and PM10 over one batch shall not exceed the following: TSP=0.15 lb/ton & PM10=0.0735 lb/ton. (45CSR13, R13-2376C, Condition A.10.)(Title V Permit Condition 4.1.12)

Emission rate of NOx shall not exceed the following; NOx=0.08 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 4.1.13.)

Emission rate of HCl shall not exceed the following (as measured downstream of any particulate control device); HCl=0.72 lb/ton (45CSR13, R13-2376C, Condition A.13.)(Title V Permit Condition 4.1.14)

Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6)
Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

A performance test shall be completed once every 5 years for PM, HCl, and D/F for the furnace. Testing of representative furnaces is allowed. (40CFR63, Subpart RRR)(Title V Permit Condition 4.3.5.)

An initial performance test must be completed for HCL, PM, and D/F within 60 days of start-up but no later than 180 days after installation. Additionally, at such times thereafter, the permittee shall conduct or have conducted performance tests which will demonstrate compliance with TSP and PM10 emission limits as set forth in Condition 4.1.12, NOx emission limits as set for in Condition 4.1.13, and compliance with the maximum stack gas concentration limit of 210 mg/m^3 at standard conditions as set forth in Condition 4.1.2 of this permit. (45 CSR13, R13-2376C, Condition A.14.)(Title V Condition 4.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<15.5 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.

Furnace should be installed, maintained and operated to minimize fugitive emissions. Additionally, the source cannot exceed the MDHI of 70 MMBtu/hr and only use natural gas. (45CSR13, R13-2376C, Condition A.1.)

Maximum hourly and annual emission rates from the furnace cannot exceed the following: (Hourly Limits)- TSP=3.12 lb.hr, PM-10=1.53 lb/hr, CO=4.9 lb/hr, NOx=5.6 lb/hr, SOx=0.04 lb/hr, VOC=0.38 lb/hr, HCl=35.43 lb/hr (within the SAPU); (Annual Limits) – TSP=9.58 tpy, PM10=4.69 tpy, CO=13.72 tpy, NOx=15.68 tpy, SOx=0.12 tpy, VOC=1.06 tpy, HCl= 108.33 tpy (within the SAPU) (45CSR 13, R13-2376C, Condition A.2.) –Compliance is demonstrated using stack test data and AP-42 emission factors.

DC-10A shall be equipped with Regenerative Low-NOx burners (45CSR13, R13-2376C, Condition A.3.)(Title V Permit Condition 4.1.5) Compliance is demonstrated with design drawings.

DC-10A shall not consume more than 743,500,000 ft^3of gas (in conjunction with DC10B) (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 4.1.9) Compliance is demonstrated through the maintaining of certified daily and monthly records of the amount of natural gas consumed on a monthly basis and the daily and average hourly charge/feed rates (45CSR13, R13-2376C, Condition B.10)(Title V Permit Condition 4.4.8.).

The DC-10 Complex (DC10A, 10B, and HF10) shall not exceed 41.67 tons/hr and an annual throughput of 255,500 tons. Compliance with the hourly can be demonstrated by taking the daily throughput and dividing by hours of operation for the day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.1.10.) Compliance is demonstrated through the maintaining of certified daily and monthly records of the amount of natural gas consumed on a monthly basis and the daily and average hourly charge/feed rates (45CSR13, R13-2376C, Condition B.10)(Title V Permit Condition 4.4.8). Compliance with the annual aluminum charge throughput limit shall be determined using a yearly total. "Average hourly throughput" shall mean the daily throughput divided by the hours of operation for that day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.4.9.)

Average emission rate of TSP and PM10 over one batch shall not exceed the following: TSP=0.15 lb/ton & PM10=0.0735 lb/ton. (45CSR13, R13-2376C, Condition A.10.)(Title V Permit Condition 4.1.12) – Compliance is demonstrated by stack test data.

Emission rate of NOx shall not exceed the following; NOx=0.08 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 4.1.13.) – Compliance is demonstrated with stack test data and MACT compliance.

Emission rate of HCl shall not exceed the following (as measured downstream of any particulate control device); HCl=0.72 lb/ton (45CSR13, R13-2376C, Condition A.13.)(Title V Permit Condition 4.1.14) – Compliance is demonstrated ?????

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. The scrap inspection plan is also followed as written in the OM&M plan and records are kept for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day,

24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

A performance test shall be completed once every 5 years for PM, HCl, and D/F for the furnace. Testing of representative furnaces is allowed. (40CFR63, Subpart RRR) Initial testing has been completed and compliance with the 5 year testing is completed at the facility on a defined schedule to stay within the 5 year requirements.

An initial performance test must be completed for HCL, PM, and D/F within 60 days of start-up but no later than 180 days after installation. Additionally, at such times thereafter, the permittee shall conduct or have conducted performance tests which will demonstrate compliance with TSP and PM10 emission limits as set forth in Condition 4.1.12, NOx emission limits as set for in Condition 4.1.13, and compliance with the maximum stack gas concentration limit of 210 mg/m^3 at standard conditions as set forth in Condition 4.1.2 of this permit. (45 CSR13, R13-2376C, Condition A.14.)(Title V Condition 4.3) MACT initial testing was completed. Additionally, testing for TSP, PM10 and NOx were completed to demonstrate compliance with the applicable regulations. Testing was performed in compliance with Title V Permit Conditions 4.3.5 and 4.3.6.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F.**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Baghouse 4
005P141	Holding Furnace 10	(001C105)

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Molten aluminum alloying

Manufacturer:	**Model number:**	**Serial number:**
Brickmont	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2001	2001	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 12 MMBtu/hr	**Type and Btu/hr rating of burners:** 2 burners @ 6 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 11,765 SCF/hr – Annual = 76.86 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 BTU/SCF

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.99	3.21
Nitrogen Oxides (NO_X)	1.65	5.38
Lead (Pb)	Neg.	Neg.
Particulate Matter ($PM_{2.5}$)	0.07	0.3
Particulate Matter (PM_{10})	0.07	0.3
Total Particulate Matter (TSP)	0.07	0.3
Sulfur Dioxide (SO_2)	0.01	0.02
Volatile Organic Compounds (VOC)	0.06	0.21
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HCl	See MACT SAPU	See MACT SAPU
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stack test data and AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<31.92 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1, 4.4.4)
HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2)
Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.1.18 & 4.1.19)

Furnace should be installed, maintained and operated to minimize fugitive emissions. Additionally, the source cannot exceed the MDHI of 14 MMBtu/hr, is only permitted to burn natural gas, and must vent to Baghouse #4. (45CSR13, R13-2376C, Condition A.1.)(Title V Permit Condition 4.1.3)

Maximum hourly and annual emission rates from the furnace cannot exceed the following: (Hourly Limits)- TSP=0.19 lb/hr, PM-10=0.19 lb/hr, CO=1.12 lb/hr, NOx=0.7 lb/hr, SOx=0.01 lb/hr, VOC=0.08 lb/hr, HCl=35.43 lb/hr (within the SAPU); (Annual Limits) – TSP=0.57 tpy, PM10=0.57 tpy, CO=3.14 tpy, NOx=1.96 tpy, SOx=0.02 tpy, VOC=0.21 tpy, HCl= 108.33 tpy (within the SAPU) (45CSR 13, R13-2376C, Condition A.2.) (Title V Permit Condition 4.1.4)

Holding Furnace 10 shall be equipped with Standard Low-NOx burners (45CSR13, R13-2376C, Condition A.3.)(Title V Permit Condition 4.1.5)

The Lime-injected baghouse, Baghouse #4 (005C105), serving Holding Furnace 10 shall be installed, maintained and operated to achieve 99% minimum PM control efficiency and 95% HCl control efficiency. The permittee shall operate and monitor the baghouse according to all applicable terms and conditions as set forth in 40CFR63 Subpart RRR. (45CSR13, R13-2376C, Condition A.5)(Title V Permit Condition 4.1.7)

Holding Furnace 10 shall not consume more than 76,862,746 ft^3of gas. (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 4.1.9)

The DC-10 Complex (DC10A, 10B, and HF10) shall not exceed 41.67 tons/hr and an annual throughput of 255,500 tons. Compliance with the hourly can be demonstrated by taking the daily throughput and dividing by hours of operation for the day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.1.10.)

Average emission rate of TSP and PM10 over one batch shall not exceed the following: TSP=0.0045 lb/ton & PM10=0.0045 lb/ton. (45CSR13, R13-2376C, Condition A.10.)(Title V Permit Condition 4.1.12)

Emission rate of NOx shall not exceed the following; NOx=0.05 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 4.1.13.)

Emission rate of HCl shall not exceed the following (as measured downstream of any particulate control device); HCl=0.095 lb/ton (45CSR13, R13-2376C, Condition A.13.)(Title V Permit Condition 4.1.14)

Recordkeeping (40CFR63 Subpart RRR) – Facility must have an SSM plan and an OM&M plan (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6)

Recordkeeping (40CFR63 Subpart RRR) Facility must operate the melting furnace as part of a SAPU with the 3-day, 24-hour rolling average emission from the pollutants be below the flowing limits: PM<0.4 lb/ton Al, HCl<0.4 lb/ton Al, D/F<3.0x10^-8 lb/ton Al (Title V Condition 4.1.17)

A performance test shall be completed once every 5 years for PM, HCl, and D/F for the furnace. Testing of representative furnaces is allowed. (40CFR63, Subpart RRR)(Title V Permit Condition 4.3.5.)

An initial performance test must be completed for HCL, PM, and D/F within 60 days of start-up but no later than 180 days after installation. Additionally, at such times thereafter, the permittee shall conduct or have conducted performance tests which will demonstrate compliance with TSP and PM10 emission limits as set forth in Condition 4.1.12, NOx emission limits as set for in Condition 4.1.13, and compliance with the maximum stack gas concentration limit of 210 mg/m^3 at standard conditions as set forth in Condition 4.1.2 of this permit. (45 CSR13, R13-2376C, Condition A.14.)(Title V Condition 4.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<31.92 lb/hr (45CSR7-4.1)(Title V permit Condition 4.1.1) – Compliance demonstrated by monthly emission estimation by taking monthly emissions and dividing by number of hours in the month. (Title V Condition 4.4.4)

HCl emission limit – HCl<210 mg/dscm (45CSR7, Table 45-7B)(Title V Condition 4.1.2) – Compliance demonstrated by stack test.(Title V Permit Condition 4.3.4.)

Furnace should be installed, maintained and operated to minimize fugitive emissions. Additionally, the source cannot exceed the MDHI of 14 MMBtu/hr, can only use natural gas, and must vent to Baghouse #4(001C005). (45CSR13, R13-2376C, Condition A.1.)(Title V Permit Condition 4.1.3)

Maximum hourly and annual emission rates from the furnace cannot exceed the following: (Hourly Limits)- TSP=0.19 lb.hr, PM-10=0.19 lb/hr, CO=1.12 lb/hr, NOx=0.7 lb/hr, SOx=0.01 lb/hr, VOC=0.08 lb/hr, HCl=35.43 lb/hr (within the SAPU); (Annual Limits) – TSP=0.57 tpy, PM10=0.57 tpy, CO=3.14 tpy, NOx=1.96 tpy, SOx=0.02 tpy, VOC=0.21 tpy, HCl= 108.33 tpy (within the SAPU) (45CSR 13, R13-2376C, Condition A.2.)(Title V Permit Condition 4.1.4)–Compliance is demonstrated using stack test data and AP-42 factors.

DC-10A shall be equipped with Standard Low-NOx burners (45CSR13, R13-2376C, Condition A.3.)(Title V Permit Condition 4.1.5) Compliance is demonstrated using design drawings.

DC-10A shall not consume more than 76,862,746 ft^3of gas. (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 4.1.9) Compliance is demonstrated through the maintaining of certified daily and monthly records of the amount of natural gas consumed on a monthly basis and the daily and average hourly charge/feed rates (45CSR13, R13-2376C, Condition B.10)(Title V Permit Condition 4.4.8.).

The DC-10 Complex (DC10A, 10B, and HF10) shall not exceed 41.67 tons/hr and an annual throughput of 255,500 tons. Compliance with the hourly can be demonstrated by taking the daily throughput and dividing by hours of operation for the day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.1.10.) Compliance is demonstrated through the maintaining of certified daily and monthly records of the amount of natural gas consumed on a monthly basis and the daily and average hourly charge/feed rates (45CSR13, R13-2376C, Condition B.10)(Title V Permit Condition 4.4.8). Compliance with the annual aluminum charge throughput limit shall be determined using a yearly total. "Average hourly throughput" shall mean the daily throughput divided by the hours of operation for that day. (45CSR13, R13-2376C, Condition A.8.)(Title V Permit Condition 4.4.9.)

Average emission rate of TSP and PM10 over one batch shall not exceed the following: TSP=0.0045 lb/ton & PM10=0.0045 lb/ton. (45CSR13, R13-2376C, Condition A.10.)(Title V Permit Condition 4.1.12) – Compliance is

demonstrated using stack test data.

Emission rate of NOx shall not exceed the following; NOx=0.05 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 4.1.13.) – Compliance is demonstrated using stack test data.

Emission rate of HCl shall not exceed the following (as measured downstream of any particulate control device); HCl=0.095 lb/ton (45CSR13, R13-2376C, Condition A.13.)(Title V Permit Condition 4.1.14) – Compliance is demonstrated using stack test data.

Recordkeeping/Monitoring (40CFR63 Subpart RRR) – Facility has an SSM plan and an OM&M plan for the furnace and complies with the requirements. The data is collected and kept on-site for 5 years. (Title V Condition 4.2.1, 4.2.13, 4.4.5, 4.4.6)

Recordkeeping (40CFR63 Subpart RRR) Facility operates the melting furnace as part of a SAPU and keeps a 3-day, 24-hour rolling average emission from the pollutants. (Title V Condition 4.1.17)

Testing (40CFR63 Subpart RRR)(Title V Condition 4.3.2) – Initial performance test was completed and compliance test must be completed every 5 years.

A performance test shall be completed once every 5 years for PM, HCl, and D/F for the furnace. Testing of representative furnaces is allowed. (40CFR63, Subpart RRR) Initial testing has been completed and compliance with the 5 year testing is completed at the facility on a defined schedule to stay within the 5 year requirements.

An initial performance test must be completed for HCL, PM, and D/F within 60 days of start-up but no later than 180 days after installation. Additionally, at such times thereafter, the permittee shall conduct or have conducted performance tests which will demonstrate compliance with TSP and PM10 emission limits as set forth in Condition 4.1.12, NOx emission limits as set for in Condition 4.1.13, and compliance with the maximum stack gas concentration limit of 210 mg/m^3 at standard conditions as set forth in Condition 4.1.2 of this permit. (45 CSR13, R13-2376C, Condition A.14.)(Title V Condition 4.3) MACT initial testing was completed. Additionally, testing for TSP, PM10 and NOx were completed to demonstrate compliance with the applicable regulations. Testing was performed in compliance with Title V Permit Conditions 4.3.5 and 4.3.6.

Reporting (40CFR63 Subpart RRR)(Title V Condition 4.5.2, 4.5.3) – Semi-annual and annual reports must be submitted.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P102	New Ingot Pusher Furnace	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum ingot heating

Manufacturer:	**Model number:**	**Serial number:**
Ebner Furnace, Wadsworth, Ohio	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2016	2017	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
15 tph

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X__Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: Actual max operating maximum 55 MMBtu/hr	**Type and Btu/hr rating of burners:** 2-stage high velocity - 48 burners @ 1.98 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 83,176 SCF/hr – Annual = 672 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 BTU/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4	16.5
Nitrogen Oxides (NO_X)	6	25
Lead (Pb)	5E-7	5E-7
Particulate Matter ($PM_{2.5}$)	0.41	1.63
Particulate Matter (PM_{10})	0.41	1.63
Total Particulate Matter (TSP)	0.41	1.63
Sulfur Dioxide (SO_2)	0.03	0.13
Volatile Organic Compounds (VOC)	0.30	1.18

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<32.0 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1, 5.4.2)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<32.0 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1) – Compliance is demonstrated by the natural gas use totals combined with AP-42 emission factors. Monthly natural gas usage will be kept on-site and available upon request. (45CSR30-5.1.c.)(Title V Permit Condition 5.4.2)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P105	27 Heat Soaking Pits (337)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum ingot heating

Manufacturer:	**Model number:**	**Serial number:**
Sunbeam Equipment Corp. (24) Surface Combustion Co. (3)	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1958	1958	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** _X__ (24) Indirect Fired __X_(3) Direct Fired
Maximum design heat input and/or maximum horsepower rating: 142.84 MMBtu/hr (total)	**Type and Btu/hr rating of burners:** 12 burners @ 0.2 MMBtu/hr 4 burners @ 0.23 MMBtu/hr Each (24) 8 burners @ 3 MMBtu/hr (1) 12 burners @ 2 MMBTU/hr (1) 4 burners @ 2.45 MMBtu/hr (1) 4 burners @ 1.34 MMBtu/hr (1)

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 140,039 SCF/hr – Annual = 2436 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Natural Gas	Neg.	Neg.	1020 Btu/SCF
Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0.27	102.31	
Nitrogen Oxides (NO_X)	0.46	170.52	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.02	9.26	
Particulate Matter (PM_{10})	0.02	9.26	
Total Particulate Matter (TSP)	0.02	9.26	
Sulfur Dioxide (SO_2)	0.00	0.73	
Volatile Organic Compounds (VOC)	0.02	6.70	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<176 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1, 5.4.2)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<176 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1) – Compliance is demonstrated by the natural gas use totals combined with AP-42 emission factors. Monthly natural gas usage will be kept on-site and available upon request. (45CSR30-5.1.c.)(Title V Permit Condition 5.4.2)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P107	168 inch Hot Mill (351)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Forming aluminum sheet

Manufacturer:	**Model number:**	**Serial number:**
United Engineering & Foundry Co. Pittsburgh, Penn.	N/A	N/A
Construction date: 1958	**Installation date:** 1958	**Modification date(s):** N/A

Design Capacity (examples: furnaces – tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:** 24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0	0	
Nitrogen Oxides (NO_X)	0	0	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0	0	
Particulate Matter (PM_{10})	0	0	
Total Particulate Matter (TSP)	0	0	
Sulfur Dioxide (SO_2)	0	0	
Volatile Organic Compounds (VOC)	10.06	44.06	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1) – Documented in state permitting Fact Sheet as insignificant for PM.

Are you in compliance with all applicable requirements for this emission unit? ___Yes __X_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P109	4 Reheat Furnaces	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Reheating of aluminum sheet

Manufacturer:	**Model number:**	**Serial number:**
Surface Combustion Corporation Park Ridge, Illinois	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1958	1958	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** _X__ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 9.168 MMBtu/hr each	**Type and Btu/hr rating of burners:** 12 burners @ 0.764 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural gas - Hourly = 8,988 SCF/hr – Annual = 24 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	7.55	1.01	
Nitrogen Oxides (NO_X)	12.58	1.68	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.68	0.09	
Particulate Matter (PM_{10})	0.68	0.09	
Total Particulate Matter (TSP)	0.68	0.09	
Sulfur Dioxide (SO_2)	0.05	0.007	
Volatile Organic Compounds (VOC)	0.49	0.066	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<10 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1, 5.4.2)

Annual natural gas consumption shall be determined using rolling yearly totals, the sum of natural gas consumed at any given time for the previous 12 months. (45CSR30-5.1.c.)(Title V Permit Condition 5.4.1.)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<10 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1) – Compliance is demonstrated by the natural gas use totals combined with AP-42 emission factors. Monthly natural gas usage will be kept on-site and available upon request. (45CSR30-5.1.c.)(Title V Permit Condition 5.4.2)

Annual natural gas consumption totals are determined using rolling yearly totals, the sum of natural gas consumed at any given time for the previous 12 months. (45CSR30-5.1.c)(Title V Condition 5.4.1)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P110	110 inch Hot Mill (355)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum sheet processing

Manufacturer:	**Model number:**	**Serial number:**
Loewy-Hydropress New York, New York	N/A	N/A
Construction date: 1958	**Installation date:** 1958	**Modification date(s):** N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0	0	
Nitrogen Oxides (NO_X)	0	0	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0	0	
Particulate Matter (PM_{10})	0	0	
Total Particulate Matter (TSP)	0	0	
Sulfur Dioxide (SO_2)	0	0	
Volatile Organic Compounds (VOC)	9.70	42.49	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1) – Documented in state permitting Fact Sheet as insignificant for PM.

Are you in compliance with all applicable requirements for this emission unit? ___Yes __X_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P113	5-Stand Hot Mill (361)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum sheet processing

Manufacturer:	**Model number:**	**Serial number:**
United Engineering & Foundry Co. Pittsburgh, Penn.	N/A	N/A
Construction date: 1958	**Installation date:** 1958	**Modification date(s):** N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2.4x10^5 lb/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0	0	
Nitrogen Oxides (NO_X)	0	0	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0	0	
Particulate Matter (PM_{10})	0	0	
Total Particulate Matter (TSP)	0	0	
Sulfur Dioxide (SO_2)	0	0	
Volatile Organic Compounds (VOC)	12.48	54.68	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 5.1.1) – Compliance is demonstrated by the equipment does not emit PM in significant amounts.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P119	Ingot Pusher	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum ingot heating

Manufacturer:	**Model number:**	**Serial number:**
Seco-Warrick	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1998	1998	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** ___ Indirect Fired __X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 45 MMBtu/hr	**Type and Btu/hr rating of burners:** 15 burners @ 3MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 44,118 SCF/hr – Annual = 360 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.71	15.12
Nitrogen Oxides (NO_X)	6.18	25.20
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.34	1.37
Particulate Matter (PM_{10})	0.34	1.37
Total Particulate Matter (TSP)	0.34	1.37
Sulfur Dioxide (SO_2)	0.03	0.11
Volatile Organic Compounds (VOC)	0.24	0.99

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.
Process Weight Rate Limit – PM <0.71 lb/hr (45CSR7-4.1)

The amount of natural gas burned as a fuel in the Ingot Pusher shall not exceed 45,000 scfh or 250,696,379 scf/yr for 12 consecutive months. (45CSR, R13-2102, Condition A.1.)(Title V Permit Condition 5.1.2.)

Ingot Pusher emissions shall not exceed the following: lb/hr; CO=1.8, NOx=7.18, SO2=0.03, Total PM=0.71, VOCs=0.14: TPY; CO=5.02, NOx=20.00, SO2=0.10, Total PM=1.97, VOCs=0.38.(45CSR13, R13-2102, Condition A.2.)(Title V Permit Condition 5.1.3.)

Compliance with the hourly emission limitations for the Ingot Pusher shall be based on a 24-hour rolling average. (45CSR13, R13-2102, Condition A.5.)(Title V Permit Condition 5.2.1)

The permittee shall maintain an efficient combustion process in the Ingot Pusher Furnace by conducting periodic maintenance checks per the manufacturer's recommendations. (45CSR13, R13-2102, Condition A.6.)(Title V Permit Condition 5.2.2.)

Operate & maintain in accordance with manufacturing recommendations & specifications, consistent with good operation practices (45CSR30-5.1 and 12.7) (Title V Permit Condition 5.2.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Process Weight Rate Limit – PM<0.71 lb/hr (45CSR7-4.1) – Compliance is demonstrated by using estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. The permittee shall estimate emissions on a monthly basis and indicate compliance by dividing the total emissions for the month by the number of hours in the month. Emission calculations shall be made available upon request of the DAQ or it representative. Emissions in excess of the applicable standard shall be reported prior to the end of the month following the compliance period. (45CSR30-5.1.c.)(Title V Permit Condition 5.4.3.)

The amount of natural gas burned as a fuel in the Ingot Pusher shall not exceed 45,000 scfh or 250,696,379 scf/yr for 12 consecutive months. (45CSR, R13-2102, Condition A.1.)(Title V Permit Condition 5.1.2.) Constellium shall monitor and maintain a certified record of the amount of natural gas burned in the Ingot Pusher. Records shall be maintained on-site for a period of not less than 5 years and made available to DAQ upon request. (45CSR13, R13-2102, Condition B.2.)(Title V Permit Condition 5.4.4.)

Ingot Pusher emissions shall not exceed the following: lb/hr; CO=1.8, NOx=7.18, SO2=0.03, Total PM=0.71, VOCs=0.14: TPY; CO=5.02, NOx=20.00, SO2=0.10, Total PM=1.97, VOCs=0.38(45CSR13, R13-2102, Condition A.2.)(Title V Permit Condition 5.1.3.) – Compliance is demonstrated by using stack test and AP-42 factors to complete emission calculations.

Compliance with the hourly emission limitations for the Ingot Pusher shall be based on a 24-hour rolling average. (45CSR13, R13-2102, Condition A.5.)(Title V Permit Condition 5.2.3) – Compliance is demonstrated using stack test and AP-42 factors to complete emission calculations.

The permittee shall maintain an efficient combustion process in the Ingot Pusher Furnace by conducting periodic maintenance checks per the manufacturer's recommendations. (45CSR13, R13-2102, Condition A.6.)(Title V Permit Condition 5.2.4.) – Compliance is demonstrated through PM records.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
006P120	Preheat Furnace	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum ingot heating

Manufacturer:	**Model number:**	**Serial number:**
Junker	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2003	2003	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 31.968 MMBtu/hr	**Type and Btu/hr rating of burners:** 36 burners @ 0.888 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural gas - Hourly = 31,341 SCF/hr – Annual = 42 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	2.63	1.76	
Nitrogen Oxides (NO_X)	4.39	2.94	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.24	0.16	
Particulate Matter (PM_{10})	0.24	0.16	
Total Particulate Matter (TSP)	0.24	0.16	
Sulfur Dioxide (SO_2)	0.02	0.013	
Volatile Organic Compounds (VOC)	0.17	0.12	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<13.36 lb/hr (45CSR7-4.1)

The Preheat Furnace shall have a maximum MDHI or 40 MMBtu/hr and combust only natural gas. (45CSR13, R13-2376C, Condition A.1.)(Title V Permit Condition 5.1.4)

Preheat Furnace emissions shall not exceed the following: lb/hr; TSP=0.3, PM10=0.3, CO=3.29, NOx=3.80, SO2=0.02, VOCs=0.22: TPY; TSP=0.16, PM10=0.16, CO=1.76, NOx=2.04, SO2=0.01, VOCs=0.12.(45CSR13, R13-2376C, Condition A.2.)(Title V Permit Condition 5.1.5.)

The annual natural gas consumption in the Preheat Furnace shall not exceed 42,000,000 scf/yr. (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 5.1.6.)

The NOx emission rate from the Preheat Furnace shall not exceed 0.097 lb/MMBtu of heat input. (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 5.1.7)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Process Weight Rate Limit – PM<13.36 lb/hr (45CSR7-4.1) – Compliance is demonstrated by using estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. The permittee shall estimate emissions on a monthly basis and indicate compliance by dividing the total emissions for the month by the number of hours in the month. Emission calculations shall be made available upon request of the DAQ or it representative. Emissions in excess of the applicable standard shall be reported prior to the end of the month following the compliance period. (45CSR30-5.1.c.)(Title V Permit Condition 5.4.3.)

The Preheat Furnace shall have a maximum MDHI or 40 MMBtu/hr and combust only natural gas. (45CSR13, R13-2376C, Condition A.1.)(Title V Permit Condition 5.1.4) – Compliance is demonstrated with design drawings.

Preheat Furnace emissions shall not exceed the following: lb/hr; TSP=0.3, PM10=0.3, CO=3.29, NOx=3.80, SO2=0.02, VOCs=0.22: TPY; TSP=0.16, PM10=0.16, CO=1.76, NOx=2.04, SO2=0.01, VOCs=0.12.(45CSR13, R13-2376C, Condition A.2.)(Title V Permit Condition 5.1.5.) –Compliance is demonstrated using stack test and AP-42 emission data to complete emission calculations.

The annual natural gas consumption in the Preheat Furnace shall not exceed 42,000,000 scf/yr. (45CSR13, R13-2376C, Condition A.7.)(Title V Permit Condition 5.1.6.) Constellium shall monitor and maintain a certified record of the amount of natural gas burned in the Ingot Pusher. Records shall be maintained on-site for a period of not less than 5 years and made available to DAQ upon request. (45CSR13, R13-2376C, Condition B.10.)(Title V Permit Condition 5.4.5.)

The NOx emission rate from the Preheat Furnace shall not exceed 0.097 lb/MMBtu of heat input. (45CSR13, R13-2376C, Condition A.11.)(Title V Permit Condition 5.1.7) – Compliance was verified with a stack test on 11/03/2004.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Demister (003C101)
007P101	72 inch Single Stand Cold Mill (384)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum sheet processing

Manufacturer:	**Model number:**	**Serial number:**
Lewis Machinery Division, Blaw Knox company Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1975	1975	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0	0
Nitrogen Oxides (NO_X)	0	0
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	19.5	85.41
Particulate Matter (PM_{10})	19.5	85.41
Total Particulate Matter (TSP)	24.42	106.96
Sulfur Dioxide (SO_2)	0	0
Volatile Organic Compounds (VOC)	0.42	1.82
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering Calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<35.4 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1)

The 72 Inch Single Stand Cold Mill shall utilize Demister 003C101 as a control device. (45CSR13, R13-0383)(Title V Permit Condition 6.1.2.)

Constellium shall maintain proper operation of the demister. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.)

Constellium shall perform annual inspection and maintenance on the demister. A record of these inspections as well as any major maintenance performed on the demister shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.3.2.)

Emission limits: PM = 0.84 lb/hr & 3.68 tpy (45CSR13) Title V Permit Condition 4.1.15)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Process Weight Rate Limit – PM<35.4 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1) – Compliance is demonstrated by maintaining and operating the demisters at all times that the mill is in operation. (Title V Permit Condition 6.3.2.)

The 72 Inch Single Stand Cold Mill shall utilize Demister 003C101 as a control device. (45CSR13, R13-0383)(Title V Permit Condition 6.1.2.) – Compliance is demonstrated by operating the demister.

Constellium shall maintain proper operation of the demister. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.) – Compliance is demonstrated by maintain the demister and performing visible emission checks. (Title V Permit Condition 6.3.2.)

Constellium shall perform annual inspection and maintenance on the demister. A record of these inspections as well as any major maintenance performed on the demister shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.3.2.) – Compliance is demonstrated by completing the required PM's on the demister and having annual inspections completed.

Emission limits: PM = 0.84 lb/hr & 3.68 tpy (45CSR13) Title V Permit Condition 4.1.15)-Compliance demonstrated by mass balance emission calculations.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Demister (003C102)
007P102	72 inch Tandem Stand Cold Mill (382)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum sheet processing

Manufacturer:	**Model number:**	**Serial number:**
Lewis Machinery Division, Blaw-Knox Company Pittsburgh, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0	0
Nitrogen Oxides (NO_X)	0	0
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	19.5	85.41
Particulate Matter (PM_{10})	19.5	85.41
Total Particulate Matter (TSP)	24.42	106.96
Sulfur Dioxide (SO_2)	0	0
Volatile Organic Compounds (VOC)	0.42	1.82

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<19.6 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1)

The 72 Inch Tandem Stand Cold Mill shall utilize Demister 003C102 as a control device. (45CSR13, R13-0383)(Title V Permit Condition 6.1.2.)

Constellium shall maintain proper operation of the demister. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.)

Constellium shall perform annual inspection and maintenance on the demister. A record of these inspections as well as any major maintenance performed on the demister shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.3.2.)

Emission limits: PM = 1.26 lb/hr & 5.52 tpy (45CSR13) Title V Permit Condition 4.1.15)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Process Weight Rate Limit – PM<19.6 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1) – Compliance is demonstrated by maintaining and operating the demisters at all times that the mill is in operation. (Title V Permit Condition 6.3.2.)

The 72 Inch Tandem Stand Cold Mill shall utilize Demister 003C102 as a control device. (45CSR13, R13-0383)(Title V Permit Condition 6.1.2.) – Compliance is demonstrated by operating the demister.

Constellium shall maintain proper operation of the demister. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.) – Compliance is demonstrated by maintain the demister and performing visible emission checks. (Title V Permit Condition 6.3.2.)

Constellium shall perform annual inspection and maintenance on the demister. A record of these inspections as well as any major maintenance performed on the demister shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.3.2.) – Compliance is demonstrated by completing the required PM's on the demister and having annual inspections completed.

Emission limits: PM = 0.84 lb/hr & 3.68 tpy (45CSR13) Title V Permit Condition 4.1.15)-Compliance demonstrated by mass balance emission calculations.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Cyclone (003C104)
007P103	130 inch Single Stand Cold Mill (386)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum sheet processing

Manufacturer:	**Model number:**	**Serial number:**
Krupp Germany	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0	0
Nitrogen Oxides (NO_X)	0	0
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	19.5	85.41
Particulate Matter (PM_{10})	19.5	85.41
Total Particulate Matter (TSP)	24.42	106.96
Sulfur Dioxide (SO_2)	0	0
Volatile Organic Compounds (VOC)	1.50	6.59

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1)

Constellium shall maintain proper operation of the cyclone. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.)

Constellium shall perform annual inspection and maintenance on the cyclone. A record of these inspections as well as any major maintenance performed on the cyclone shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.4.2.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<38.2 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1) – Compliance is demonstrated by maintaining and operating the cyclone at all times that the mill is in operation. (Title V Permit Condition 6.3.2.)

Constellium shall maintain proper operation of the cyclone. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.) – Compliance is demonstrated by maintain the cyclone and performing visible emission checks. (Title V Permit Condition 6.3.2.)

Constellium shall perform annual inspection and maintenance on the cyclone. A record of these inspections as well as any major maintenance performed on the cyclone shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.4.2.) – Compliance is demonstrated by completing the required PM's on the demister and having annual inspections completed.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Demister (003C103)
007P105	5-Stand Cold Mill (381)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum sheet processing

Manufacturer:	**Model number:**	**Serial number:**
Loewy-Hydropress Division of Baldwin-Lima-Hamilton Corp., Philadelphia, Penn.	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
1975	1975	N/A

Design Capacity (examples: furnaces – tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0	0
Nitrogen Oxides (NO_X)	0	0
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	19.5	85.41
Particulate Matter (PM_{10})	19.5	85.41
Total Particulate Matter (TSP)	24.42	106.96
Sulfur Dioxide (SO_2)	0	0
Volatile Organic Compounds (VOC)	0.58	2.54

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<33.8 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1)

Constellium shall maintain proper operation of the demister. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.)

Constellium shall perform annual inspection and maintenance on the demister. A record of these inspections as well as any major maintenance performed on the demister shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.4.2.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<33.8 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1) – Compliance is demonstrated by maintaining and operating the demister at all times that the mill is in operation. (Title V Permit Condition 6.3.2.)

Constellium shall maintain proper operation of the demister. The permittee shall also perform visible emission checks in accordance with Section 3.2.1. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.1.) – Compliance is demonstrated by maintain the demister and performing visible emission checks. (Title V Permit Condition 6.3.2.)

Constellium shall perform annual inspection and maintenance on the demister. A record of these inspections as well as any major maintenance performed on the demister shall be kept for 5 years and made available to the Director as requested. (45CSR30-5.1.c)(Title V Permit Condition 6.4.2.) – Compliance is demonstrated by completing the required PM's on the demister and having annual inspections completed.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
007P107	Cold Roll Annealing Furnaces	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating

Manufacturer:	**Model number:**	**Serial number:**
Surface Combustion	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_Yes ___ No	**If yes, is it?** _X__ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 7.68 MMBtu/hr each or 107.52 MMBTU/hr (total for 14)	**Type and Btu/hr rating of burners:** 12 burners @0.64 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural gas - Hourly = 105,412 SCF/hr – Annual = 1451 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	Neg.	Neg.	1020 BTU/scf

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.63	60.94
Nitrogen Oxides (NO_X)	1.05	101.57
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.06	5.51
Particulate Matter (PM_{10})	0.06	5.51
Total Particulate Matter (TSP)	0.06	5.51
Sulfur Dioxide (SO_2)	0.00	0.44
Volatile Organic Compounds (VOC)	0.04	3.99

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<36.36 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1)

The Coil Roll Annealing Furnaces shall be operated and maintained in accordance with manufacturer's recommendations and specifications and in a manner consistent with good operating practices. It shall also burn only natural gas. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.2)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<36.36 lb/hr (45CSR7-4.1)(Title V permit Condition 6.1.1) – Compliance is demonstrated by collecting the natural gas usage. The annual natural gas consumption shall be determined by using rolling yearly totals, the sum of natural gas used for the previous 12 consecutive months. (45CSR30-5.1.c)(Title V Permit Condition 6.3.1.)

The Coil Roll Annealing Furnaces shall be operated and maintained in accordance with manufacturer's recommendations and specifications and in a manner consistent with good operating practices. It shall also burn only natural gas. (45CSR30-5.1.c.)(Title V Permit Condition 6.2.2) – Compliance is demonstrated by servicing the furnaces with PMs on a regular schedule and equipping the furnaces with natural gas only burners.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P102	Salem 12 Zone Heat Treat Furnace	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Salem-Brosius, Incorporated. c/o W.P. Woolridge Company Burlingame, California	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
1960	1960	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_Yes ___ No	**If yes, is it?** _X__ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 17.25 MMBTU/hr	**Type and Btu/hr rating of burners:** 69 burners @ 0.25 MMBTU/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 16,912 SCF/hr – Annual = 148 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	1.42	6.22
Nitrogen Oxides (NO_X)	2.37	10.36
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.13	0.56
Particulate Matter (PM_{10})	0.13	0.56
Total Particulate Matter (TSP)	0.13	0.56
Sulfur Dioxide (SO_2)	0.01	0.04
Volatile Organic Compounds (VOC)	0.09	0.41

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<6 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1)

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<6 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1) – Compliance is demonstrated by using the natural gas totals combined with AP-42 emission factors. Monthly gas usage is kept on-site and made available upon request. (45CSR30-5.1.c)(Title V Permit Condition 7.4.1.)

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)- Compliance is demonstrated with PM records.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P103	144 inch Plate Mill (371)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Aluminum plate processing

Manufacturer:	**Model number:**	**Serial number:**
United	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1960	1960	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0	0	
Nitrogen Oxides (NO_X)	0	0	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0	0	
Particulate Matter (PM_{10})	0	0	
Total Particulate Matter (TSP)	0	0	
Sulfur Dioxide (SO_2)	0	0	
Volatile Organic Compounds (VOC)	1.11	4.86	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P104	120 foot Aging Furnace (340)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Loftus Engineering Company	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 60.12 MMBtu/hr	**Type and Btu/hr rating of burners:** 72 burners @0.835 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 58,941 SCF/hr – Annual = 61.20 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	4.95	17.98	
Nitrogen Oxides (NO_X)	8.25	29.96	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.45	1.63	
Particulate Matter (PM_{10})	0.45	1.63	
Total Particulate Matter (TSP)	0.45	1.63	
Sulfur Dioxide (SO_2)	0.04	0.13	
Volatile Organic Compounds (VOC)	0.32	1.18	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).
AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<13.72 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1)

Annual natural gas consumption for the furnace shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR30-5.1.c.)

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<13.72 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1) – Compliance is demonstrated by using the natural gas totals combined with AP-42 emission factors. Monthly gas usage is kept on-site and made available upon request. (45CSR30-5.1.c)(Title V Permit Condition 7.4.1.)

Annual natural gas consumption for the furnace shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR30-5.c.1.) – Compliance is demonstrated by collecting natural gas consumption data for the furnace and maintaining it as required.

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)- Compliance is demonstrated with PM records.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P105	60 foot Aging Furnace	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Loftus Engineering Company	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
162,000 lbs

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_ Yes ___ No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 7.68 MMBtu/hr	**Type and Btu/hr rating of burners:** 12 burners @0.64 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 7,529 SCF/hr – Annual = 8.8 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.63	2.57
Nitrogen Oxides (NO_X)	1.05	4.28
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.06	0.233
Particulate Matter (PM_{10})	0.06	0.233
Total Particulate Matter (TSP)	0.06	0.233
Sulfur Dioxide (SO_2)	0.00	0.018
Volatile Organic Compounds (VOC)	0.04	0.168

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<8.1 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1)

Annual natural gas consumption for the furnace shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR30-5.1.c.)(Title V Condition 7.2.1.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<8.1 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1) – Compliance is demonstrated by using the natural gas totals combined with AP-42 emission factors. Monthly gas usage is kept on-site and made available upon request. (45CSR30-5.1.c)(Title V Permit Condition 7.4.1.)

Annual natural gas consumption for the furnace shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR30-5.c.1.)(Title V Condition 7.2.1.) – Compliance is demonstrated by collecting natural gas consumption data for the furnace and maintaining it as required.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P110	Horizontal Heat Treat Furnace	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Seco-Warrick	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1998	1998	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 29.16 MMBTU/hr	**Type and Btu/hr rating of burners:** 36 burners @0.81 MMBTU/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 28,588 SCF/hr – Annual = 40.6 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.40	1.71
Nitrogen Oxides (NO_X)	4.00	2.84
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.22	0.154
Particulate Matter (PM_{10})	0.22	0.154
Total Particulate Matter (TSP)	0.22	0.154
Sulfur Dioxide (SO_2)	0.02	0.012
Volatile Organic Compounds (VOC)	0.16	0.112

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emissions factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<0.3 lb/hr (45CSR7-4.1)

The amount of natural gas burned as a fuel in the furnace shall not exceed 26,500 SCF or 198,940,937 SCFY for 12 consecutive months. (45CSR13, R13-2102, Condition A.3.)(Title V Permit Condition 7.1.6.)

Emissions from the furnace shall not exceed the following: lb/hr; CO=0.75, NOx=4.91, SO2=0.01, Total PM=0.3, VOCs=0.06: TPY; CO=2.83, NOx=18.50, SO2=0.04, Total PM=1.12, VOCs=0.21. (45CSR13, R13-2102, Condition A.4.)(Title V Permit Condition 7.1.7.)

Compliance with hourly emissions shall be determined based on a 24 hour rolling average. (45CSR13, R13-2102, Condition A.5.)(Title V Permit Condition 7.2.2.)

The permittee shall maintain an efficient combustion process in the furnace by conducting periodic maintenance checks per manufacturer's recommendations. (45CSR13, R13-2102, Condition A.6.)(Title V Permit Condition 7.2.3.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<0.3 lb/hr (45CSR7-4.1)– Compliance is demonstrated by using the natural gas usage data collected in conjunction with AP-42 emission factors.(45CSR13, R13-2102, Condition B.2.)

The amount of natural gas burned as a fuel in the furnace shall not exceed 26,500 SCF or 198,940,937 SCFY for 12 consecutive months. (45CSR13, R13-2102, Condition A.3.)(Title V Permit Condition 7.1.6.) The permittee shall monitor and maintain a certified record of the amount of natural gas burned in the furnace and shall keep the information on-site for a period of not less than 5 years and be made available to the Director upon request. (45CSR13, R13-2102, Condition B.2.)(Title V Permit Condition 7.4.4.)

Emissions from the furnace shall not exceed the following: lb/hr; CO=0.75, NOx=4.91, SO2=0.01, Total PM=0.3, VOCs=0.06: TPY; CO=2.83, NOx=18.50, SO2=0.04, Total PM=1.12, VOCs=0.21. (45CSR13, R13-2102, Condition A.4.)(Title V Permit Condition 7.1.7.) – Compliance is demonstrated using stack test data and AP-42 factors to complete emission calculations.

Compliance with hourly emissions shall be determined based on a 24 hour rolling average. (45CSR13, R13-2102, Condition A.5.)(Title V Permit Condition 7.2.2.) – Compliance is demonstrated stack test data and AP-42 factors to complete emission calculations.

The permittee shall maintain an efficient combustion process in the furnace by conducting periodic maintenance checks per manufacturer's recommendations. (45CSR13, R13-2102, Condition A.6.)(Title V Permit Condition 7.2.3.) – Compliance is demonstrated with PM records.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P112	Horizontal Heat Treat Furnace Addition	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Seco-Warrick	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2003	2003	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__ Yes ___ No	**If yes, is it?** _X__ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 19.44 MMBtu/hr	**Type and Btu/hr rating of burners:** 24 burners @ 0.81 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 19,059 SCF/hr – Annual = part of HHT

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	1.60	0.82	
Nitrogen Oxides (NO_X)	2.67	1.36	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.14	0.07	
Particulate Matter (PM_{10})	0.14	0.07	
Total Particulate Matter (TSP)	0.14	0.07	
Sulfur Dioxide (SO_2)	0.01	0.01	
Volatile Organic Compounds (VOC)	0.10	0.05	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emissions factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<0.14 lb/hr (45CSR7-4.1)

The furnace shall not exceed 19.44 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)(Title V Permit Condition 7.1.2.)

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.14, PM10=0.14, CO=1.6, NOx=1.95, SO2=0.01, VOCs=0.1: TPY; TSP=0.15, PM10=0.15, CO=1.71, NOx=2.08, SO2=0.01, VOCs=0.11. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)(Title V Permit Condition 7.1.3.)

The amount of natural gas burned as a fuel in the furnace shall not exceed 40,600,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)(Title V Permit Condition 7.1.4.)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7)(Title V Permit Condition 7.1.5.)

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)(Title V Permit Condition 7.4.1.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<0.14 lb/hr (45CSR7-4.1) - Compliance is demonstrated through estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. Each calculated emission rate and the applicable emission limit shall be recorded and made available upon request by the DAQ. Excess emissions shall be reported prior to the end of the month following the compliance period. (45CSr30-5.1.c)

The furnace shall not exceed 19.44 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)(Title V Permit Condition 7.1.2.) – Compliance is demonstrated with design drawings.

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)- Compliance is demonstrated with PM records.

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.14, PM10=0.14, CO=1.6, NOx=1.95, SO2=0.01, VOCs=0.1: TPY; TSP=0.15, PM10=0.15, CO=1.71, NOx=2.08, SO2=0.01, VOCs=0.11. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)(Title V Permit Condition 7.1.3.) – Compliance is demonstrated with stack test data and AP-42 factors to complete emission calculations.

The amount of natural gas burned as a fuel in the furnace shall not exceed 40,600,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)(Title V Permit Condition 7.1.4.) – Compliance is demonstrated using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-5.1.c)(Title V Permit Condition 7.4.5.)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7)(Title V Permit Condition 7.1.5.) – Compliance is demonstrated from stack test completed in September 2001.

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)(Title V Permit Condition 7.4.1.) Compliance is demonstrated with natural gas records.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P113	Horizontal Heat Treat Furnace Addition #2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treatment of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Seco-Warrick	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2006	2006	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 19.44 MMBtu/hr	**Type and Btu/hr rating of burners:** 24 burners @ 0.81 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 19,059 SCF/hr – Annual = Part of Salem HHT

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020Btu/SCF

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	1.60	0.82
Nitrogen Oxides (NO_X)	2.67	1.36
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.14	0.07
Particulate Matter (PM_{10})	0.14	0.07
Total Particulate Matter (TSP)	0.14	0.07
Sulfur Dioxide (SO_2)	0.01	0.01
Volatile Organic Compounds (VOC)	0.10	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<6.60 lb/hr (45CSR7-4.1)

The furnace shall not exceed 19.44 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.14, PM10=0.14, CO=1.6, NOx=1.95, SO2=0.01, VOCs=0.1: TPY; TSP=0.15, PM10=0.15, CO=1.71, NOx=2.08, SO2=0.01, VOCs=0.11. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)

The amount of natural gas burned as a fuel in the furnace shall not exceed 40,600,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7)

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<6.60 lb/hr (45CSR7-4.1)-Compliance is demonstrated through estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. Each calculated emission rate and the applicable emission limit shall be recorded and made available upon request by the DAQ. Excess emissions shall be reported prior to the end of the month following the compliance period. (45CSr30-5.1.c)

The furnace shall not exceed 19.44 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)– Compliance is demonstrated with design drawings.

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.14, PM10=0.14, CO=1.6, NOx=1.95, SO2=0.01, VOCs=0.1: TPY; TSP=0.15, PM10=0.15, CO=1.71, NOx=2.08, SO2=0.01, VOCs=0.11. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)– Compliance is demonstrated using stack test data and AP-42 factors to complete emission calculations.

The amount of natural gas burned as a fuel in the furnace shall not exceed 40,600,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)– Compliance is demonstrated using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-5.1.c)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition

A.11.)(45CSR30-12.7)– Compliance is demonstrated from previous stack test data.

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)- Compliance is demonstrated from previous stack test data.

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)- Compliance is demonstrated with PM records.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P111	Aging Furnace	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Seco-Warrick	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2001	2001	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 7.68 MMBtu/hr	**Type and Btu/hr rating of burners:** 12 burners @0.64 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 7,529 SCF/hr – Annual = 8.8 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.63	0.37
Nitrogen Oxides (NO_X)	1.05	0.616
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.06	0.033
Particulate Matter (PM_{10})	0.06	0.033
Total Particulate Matter (TSP)	0.06	0.033
Sulfur Dioxide (SO_2)	0.00	0.003
Volatile Organic Compounds (VOC)	0.04	0.024
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<2.16 lb/hr (45CSR7-4.1)

The furnace shall not exceed 7.68 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)(Title V Permit Condition 7.1.2.)

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.06, PM10=0.06, CO=0.63, NOx=0.77, SO2=0.01, VOCs=0.04: TPY; TSP=0.03, PM10=0.03, CO=0.37, NOx=0.45, SO2=0.01, VOCs=0.02. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)(Title V Permit Condition 7.1.3.)

The amount of natural gas burned as a fuel in the furnace shall not exceed 8,800,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)(Title V Permit Condition 7.1.4.)

Furnace shall be operated and maintained in accordance with the manufacturing recommendations and specifications, and in a manner consistent with good operating practices (Title V Permit Condition 7.2.1)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7)(Title V Permit Condition 7.1.5.)

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<2.16 lb/hr (45CSR7-4.1)-Compliance is demonstrated through estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. Each calculated emission rate and the applicable emission limit shall be recorded and made available upon request by the DAQ. Excess emissions shall be reported prior to the end of the month following the compliance period. (45CSr30-5.1.c)

The furnace shall not exceed 7.68 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)(Title V Permit Condition 7.1.2.) – Compliance is demonstrated using design drawings.

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.06, PM10=0.06, CO=0.63, NOx=0.77, SO2=0.01, VOCs=0.04: TPY; TSP=0.03, PM10=0.03, CO=0.37, NOx=0.45, SO2=0.01, VOCs=0.02. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)(Title V Permit Condition 7.1.3.) – Compliance is demonstrated using stack test data and AP-42 emission factors to complete emission calculations.

The amount of natural gas burned as a fuel in the furnace shall not exceed 8,800,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)(Title V Permit Condition 7.1.4.) – Compliance is demonstrated using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-5.1.c)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7)(Title V Permit Condition 7.1.5.) – Compliance is demonstrated by a March 2002 stack test.

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)- Compliance is demonstrated with natural gas records.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008P114	Aging Furnace #2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum plate

Manufacturer:	**Model number:**	**Serial number:**
Seco-Warrick	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2006	2006	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 7.68 MMBtu/hr	**Type and Btu/hr rating of burners:** 12 burners @0.64 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 7,529 SCF/hr – Annual = 8.8 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.63	0.37
Nitrogen Oxides (NO_X)	1.05	0.62
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.06	0.03
Particulate Matter (PM_{10})	0.06	0.03
Total Particulate Matter (TSP)	0.06	0.03
Sulfur Dioxide (SO_2)	0.00	0.003
Volatile Organic Compounds (VOC)	0.04	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<2.16 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1)

The furnace shall not exceed 7.68 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.06, PM10=0.06, CO=0.63, NOx=0.77, SO2=0.01, VOCs=0.04: TPY; TSP=0.03, PM10=0.03, CO=0.37, NOx=0.45, SO2=0.01, VOCs=0.02. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)

The amount of natural gas burned as a fuel in the furnace shall not exceed 8,800,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7)

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<2.16 lb/hr (45CSR7-4.1)(Title V permit Condition 7.1.1) Compliance is demonstrated through estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. Each calculated emission rate and the applicable emission limit shall be recorded and made available upon request by the DAQ. Excess emissions shall be reported prior to the end of the month following the compliance period. (45CSR30-5.1.c)

The furnace shall not exceed 7.68 MMBtu/hr MDHI and must be operated on natural gas. (45CSR13, R13-2376C, Condition A.1.)(45CSR30-12.7)– Compliance is demonstrated with design drawings.

Emissions from the furnace shall not exceed the following: lb/hr; TSP=0.06, PM10=0.06, CO=0.63, NOx=0.77, SO2=0.01, VOCs=0.04: TPY; TSP=0.03, PM10=0.03, CO=0.37, NOx=0.45, SO2=0.01, VOCs=0.02. (45CSR13, R13-2376C, Condition A.2.)(45CSR30-12.7)– Compliance is demonstrated using stack test data and AP-42 factors to complete emission calculations.

The amount of natural gas burned as a fuel in the furnace shall not exceed 8,800,000 SCFY for 12 consecutive months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-12.7)– Compliance is demonstrated using rolling yearly totals. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous 12 months. (45CSR13, R13-2376C, Condition A.7.)(45CSR30-5.1.c)

The emission rate of NOx from the furnace shall not exceed 0.100 lb/MMBtu. (45CSR13, R13-2376C, Condition A.11.)(45CSR30-12.7) – Compliance is demonstrated using previous stack test.

The permittee shall maintain certified monthly records of the amount of natural gas consumed by the furnace. The records shall be maintained for at least 5 years and made available to the Director upon request. (45CSR13, R13-2376C, Condition B.10.)- Compliance is demonstrated with natural gas records.

Are you in compliance with all applicable requirements for this emission unit? __X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
009P103	Coil Annealing Furnaces (413)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum coil

Manufacturer:	**Model number:**	**Serial number:**
Sunbeam Equipment Corp. Meadville, Penn.	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** __X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 2.5 MMBtu/hr each or 35 MMBtu/hr (total for 14)	**Type and Btu/hr rating of burners:** 6 burners @0.3125 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 34.314 SCF/hr – Annual = 170 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.15	7.14
Nitrogen Oxides (NO_X)	0.25	11.90
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.01	0.646
Particulate Matter (PM_{10})	0.01	0.646
Total Particulate Matter (TSP)	0.01	0.646
Sulfur Dioxide (SO_2)	0.00	0.51
Volatile Organic Compounds (VOC)	0.01	0.468
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<32.84 lb/hr (45CSR7-4.1)(Title V permit Condition 8.1.1)

The furnaces should be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The furnaces shall also only burn natural gas, as stated in Section 3.1.18 of the permit. (45CSR30-5.1.c)(Title V Permit Condition 8.2.1)

Annual natural gas consumption for the furnaces shall be determined using rolling yearly totals, the sum of natural gas consumed at any given time in the previous 12 consecutive months. (45CSR30-5.1.c)(Title V Permit Condition 8.4.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<32.84 lb/hr (45CSR7-4.1)(Title V permit Condition 8.1.1) – Compliance is demonstrated by using the natural gas consumption records gathered in Condition 8.3.1 in conjunction with AP-42 emission factors. (Title V Permit Condition 8.3.1.)

The furnaces should be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The furnaces shall also only burn natural gas, as stated in Section 3.1.18 of the permit. (45CSR30-5.1.c)(Title V Permit Condition 8.2.1) – Compliance is demonstrated by the furnaces being on a consistent PM schedule and being outfitted with natural gas only burners.

Annual natural gas consumption for the furnaces shall be determined using rolling yearly totals, the sum of natural gas consumed at any given time in the previous 12 consecutive months. (45CSR30-5.1.c)(Title V Permit Condition 8.4.1) – Compliance is demonstrated by collecting the natural gas consumption records, as required.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
009P104	Coil Annealing Furnaces (521)	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Heat treating of aluminum coil

Manufacturer:	**Model number:**	**Serial number:**
Surface Combustion Corp. Park Ridge, Illinois	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X_Yes ___ No	**If yes, is it?** _X__ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 7.68 MMBtu/hr or 84.48 MMBTU/hr (total for 11)	**Type and Btu/hr rating of burners:** 12 burners @0.64 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas - Hourly = 82,824 SCF/hr – Annual = 1157 MMSCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Neg.	Neg.	1020 Btu/SCF

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0.63	48.95	
Nitrogen Oxides (NO_X)	1.05	80.99	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.06	4.397	
Particulate Matter (PM_{10})	0.06	4.397	
Total Particulate Matter (TSP)	0.06	4.397	
Sulfur Dioxide (SO_2)	0.00	0.347	
Volatile Organic Compounds (VOC)	0.04	3.182	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 emission factors

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<33.8 lb/hr (45CSR7-4.1)(Title V permit Condition 8.1.1)

The furnaces should be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The furnaces shall also only burn natural gas, as stated in Section 3.1.18 of the permit. (45CSR30-5.1.c)(Title V Permit Condition 8.2.1)

Annual natural gas consumption for the furnaces shall be determined using rolling yearly totals, the sum of natural gas consumed at any given time in the previous 12 consecutive months. (45CSR30-5.1.c)(Title V Permit Condition 8.4.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<33.8 lb/hr (45CSR7-4.1)(Title V permit Condition 8.1.1) – Compliance is demonstrated by using the natural gas consumption records gathered in Condition 8.3.1 in conjunction with AP-42 emission factors. (Title V Permit Condition 8.3.1.)

The furnaces should be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices. The furnaces shall also only burn natural gas, as stated in Section 3.1.18 of the permit. (45CSR30-5.1.c)(Title V Permit Condition 8.2.1) – Compliance is demonstrated by the furnaces being on a consistent PM schedule and being outfitted with natural gas only burners.

Annual natural gas consumption for the furnaces shall be determined using rolling yearly totals, the sum of natural gas consumed at any given time in the previous 12 consecutive months. (45CSR30-5.1.c)(Title V Permit Condition 8.4.1) – Compliance is demonstrated by collecting the natural gas consumption records, as required.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
010P201	Dust Transfer Station	Baghouse R-2 (010C201)

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Management of dust from APC devices

Manufacturer:	**Model number:**	**Serial number:**
	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
1995	1995	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		24/7/52 minus downtime

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0	0	
Nitrogen Oxides (NO_X)	0	0	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	4.59	4.77	
Particulate Matter (PM_{10})	4.59	4.77	
Total Particulate Matter (TSP)	4.59	4.77	
Sulfur Dioxide (SO_2)	0	0	
Volatile Organic Compounds (VOC)	0	0	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Process Weight Rate Limit – PM<15.09 lb/hr (45CSR7-4.1)(Title V permit Condition 9.1.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Process Weight Rate Limit – PM<15.09 lb/hr (45CSR7-4.1)(Title V permit Condition 8.1.1) Compliance is demonstrated through estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. Each calculated emission rate and the applicable emission limit shall be recorded and made available upon request by the DAQ. Excess emissions shall be reported prior to the end of the month following the compliance period. (45CSR30-5.1.c)(Title V Permit Condition 9.4.1.)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Baghouse R-
010P207	Cummins Emergency Generator	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Management of dust from APC devices
Emergency Backup Generator for the Computer Building

Manufacturer:	**Model number:**	**Serial number:**
Cummins	DFEG-1342631	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2016	March 2017	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
755 HP

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
		100 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _x__Yes _ __ No	**If yes, is it?** ___ Indirect Fired _x__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 755 HP	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Diesel – 24.1 gph; 2410 gpy

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel	0.29 lb/MMBTU		19,300 BTU/lb

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	0.67	0.03	
Nitrogen Oxides (NO_X)	7.16	0.36	
Lead (Pb)	0	0	
Particulate Matter ($PM_{2.5}$)	0.17	0.01	
Particulate Matter (PM_{10})	0.17	0.01	
Total Particulate Matter (TSP)	0.17	0.01	
Sulfur Dioxide (SO_2)	0.96	0.05	
Volatile Organic Compounds (VOC)	0	0	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
Formaldehyde	.0039	.0002	
Benzene	.0031	.0002	
Toluene	.0014	.0001	
Xylenes	.0009	.0000	

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).
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Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

RICE – (40 CFR Subpart ZZZZ)(45CSR34)(Title V permit Condition 9.1.2 – 9.1.10; 9.2.1-9.2.4; 9.4.1-9.4.6, 9.5.1-9.5.3)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Operate and maintain according to manufactures specification (Title V permit Condition 9.2.1a, 9.2.3)
Install non-resettable hour meter (Title V permit Condition 9.2.1b). Minimize idling and startup to 30 minutes (Title V permit Condition 9.2.1c)

9.4.2. For the emergency engines, you must keep the following records:
a. 1. A copy of each notification and report that you submitted to comply with 40 CFR part 63, subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR § 63.10(b)(2)(xiv).
2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment
3. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
9.4.3. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
[45CSR16; 40 CFR §60.4214(b), 45CSR13 General Permit Registration G60-C065 &G60-C, 7.3.7. *(EG-1)*]
9.4.4. For the purpose of determining compliance with the Maximum Yearly Operation Limitation, a person

designated by a Responsible Official or Authorized Representative shall maintain records of hours of operation.
[45CSR13 General Permit Registration G60-C065 &G60-C, 7.3.1.a. *(EG-1)*]
9.4.5. To demonstrate compliance with section 9.1.6, the permittee shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the registrant for a period of five (5) years. 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 General Permit Registration G60-C065 &G60-C, 5.4.1. *(EG-1)*]
9.4.6. The permittee shall maintain maintenance records relating to failure and/or repair of emergency generator equipment. In the event of equipment or system failure, these records shall document the permittee's effort to maintain proper and effective operation of such equipment and/or systems.
[45CSR13 General Permit Registration G60-C065 &G60-C, 7.3.3.a. *(EG-1)*]

9.5. Reporting Requirements
9.5.1. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order
to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.
[45CSR34; 40 CFR part 63, subpart ZZZZ, Footnote 1 of Table 2c *(Emergency Generators)*]
9.5.2. If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates
or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Sections 9.1.4.c.ii. and iii., you must submit an annual report according to the requirements in paragraphs a. through c. below:
a. The report must contain the following information:
i. Company name and address where the engine is located.
ii. Date of the report and beginning and ending dates of the reporting period.
iii. Engine site rating and model year.
iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
v. Hours operated for the purposes specified in Sections 9.1.4.c.ii. and iii., including the date, start time, and end time for engine operation for the purposes specified in Sections 9.1.4.c.ii. and iii.
vi. Number of hours the engine is contractually obligated to be available for the purposes specified in Sections 9.1.4.c.ii. and iii.
vii. Hours spent for operation for the purpose specified in Section 9.1.4.c.ii., including the date, start time, and end time for engine operation for the purposes specified in Section 9.1.4.c.ii. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
viii. If there were no deviations from the fuel requirements in Section 9.1.5. that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
ix. If there were deviations from the fuel requirements in Section 9.1.5. that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR § 63.13.
[45CSR34; 40 CFR §63.6650(h) *(Emergency Generators)*]
9.5.3. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with 40 CFR §63.6590(b), your notification should include the information in 40 CFR

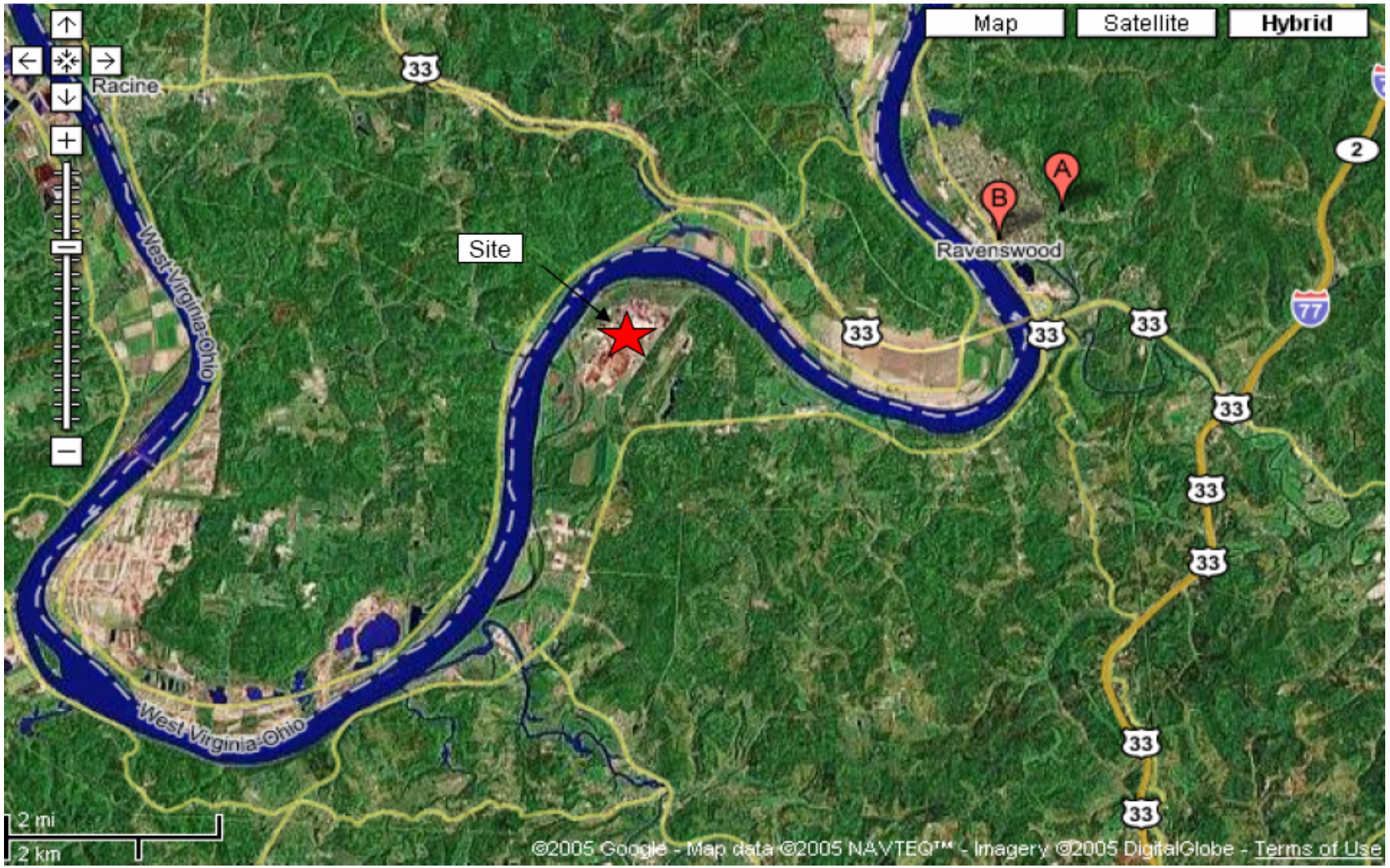
§63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
[45CSR34; 40 CFR §63.6645(f) *(EG-1)*]
Compliance is demonstrated through estimation of emissions from the sources using stack test data, emission factors, or engineering calculations previously approved by DAQ. Each calculated emission rate and the applicable emission limit shall be recorded and made available upon request by the DAQ. Excess emissions shall be reported prior to the end of the month following the compliance period. (45CSR30-5.1.c)(Title V Permit Condition 9.4.1.)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

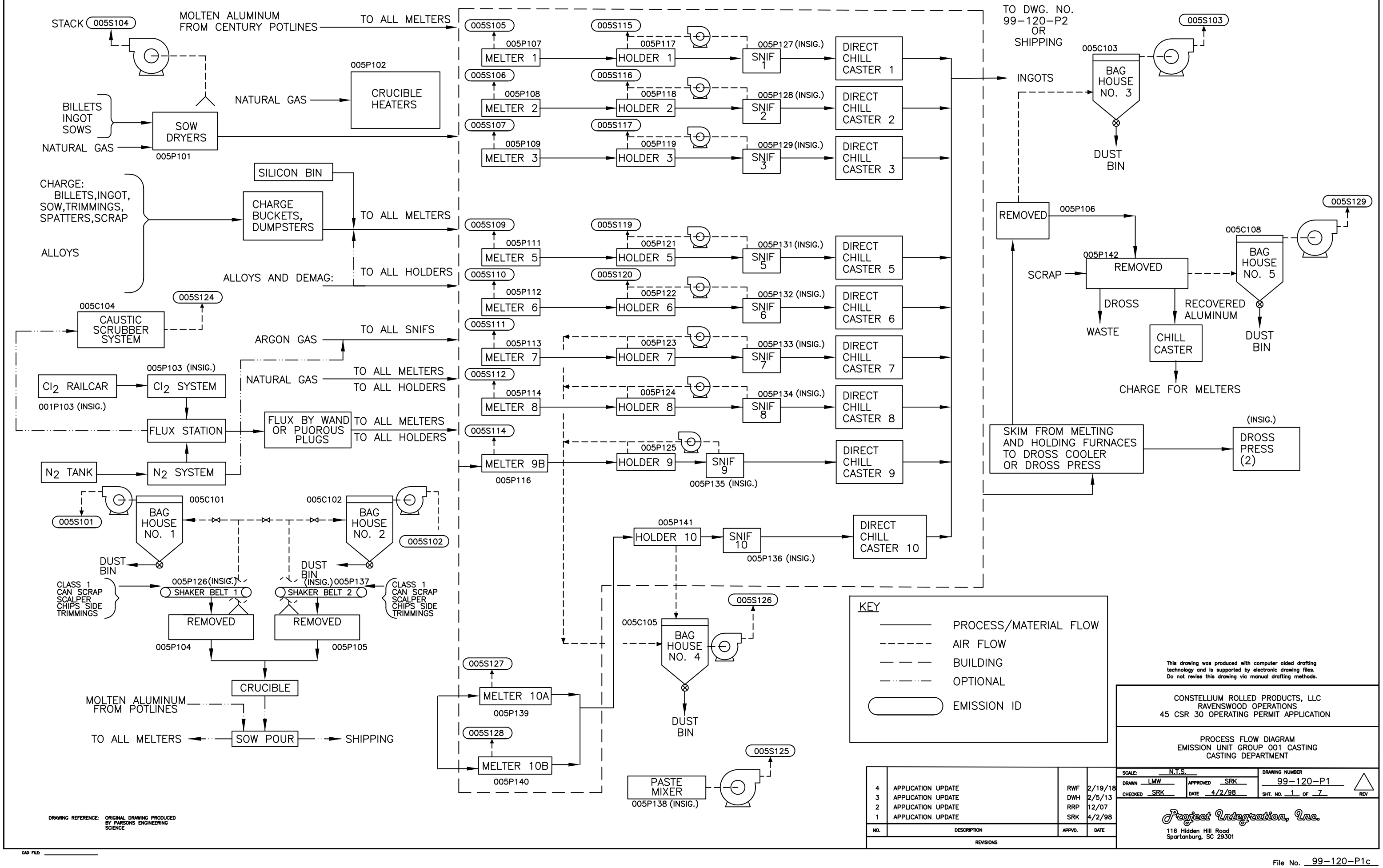
If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Appendix C
Process Flow Diagrams/Site Map/Plot Plan

Figure 1
Area Map
Constellium Rolled Products, LLC



Constellium Rolled Products, LLC
Route 2 South
Ravenswood, West Virginia 26164
UTM Easting 428.30 km - UTM Northing 4308.60



DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

CAD FILE: _____

This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.

CONSTELLIUM ROLLED PRODUCTS, LLC
RAVENSWOOD OPERATIONS
45 CSR 30 OPERATING PERMIT APPLICATION

PROCESS FLOW DIAGRAM
EMISSION UNIT GROUP 001 CASTING
CASTING DEPARTMENT

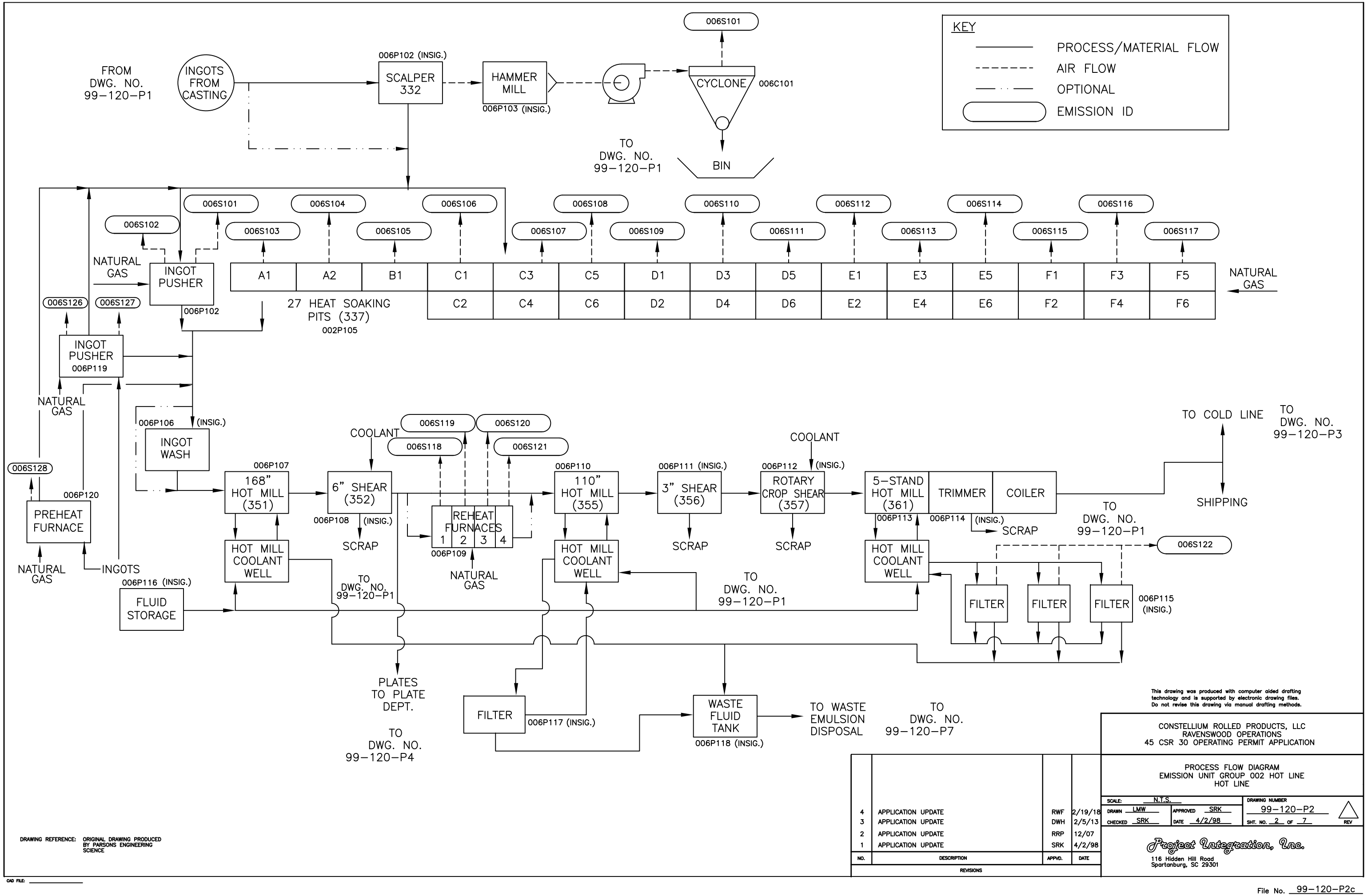
NO.	DESCRIPTION	APPVD.	DATE
4	APPLICATION UPDATE	RWF	2/19/18
3	APPLICATION UPDATE	DWH	2/5/13
2	APPLICATION UPDATE	RRP	12/07
1	APPLICATION UPDATE	SRK	4/2/98

REVISIONS

SCALE: N.T.S.
DRAWN LMW
CHECKED SRK
APPROVED SRK
DATE 4/2/98
DRAWING NUMBER 99-120-P1
SHT. NO. 1 OF 7
REV

Project Integration, Inc.
116 Hidden Hill Road
Spartanburg, SC 29301

File No. 99-120-P1c



DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

CAD FILE: _____

NO.	DESCRIPTION	APPVD.	DATE
4	APPLICATION UPDATE	RWF	2/19/18
3	APPLICATION UPDATE	DWH	2/5/13
2	APPLICATION UPDATE	RRP	12/07
1	APPLICATION UPDATE	SRK	4/2/98

REVISIONS

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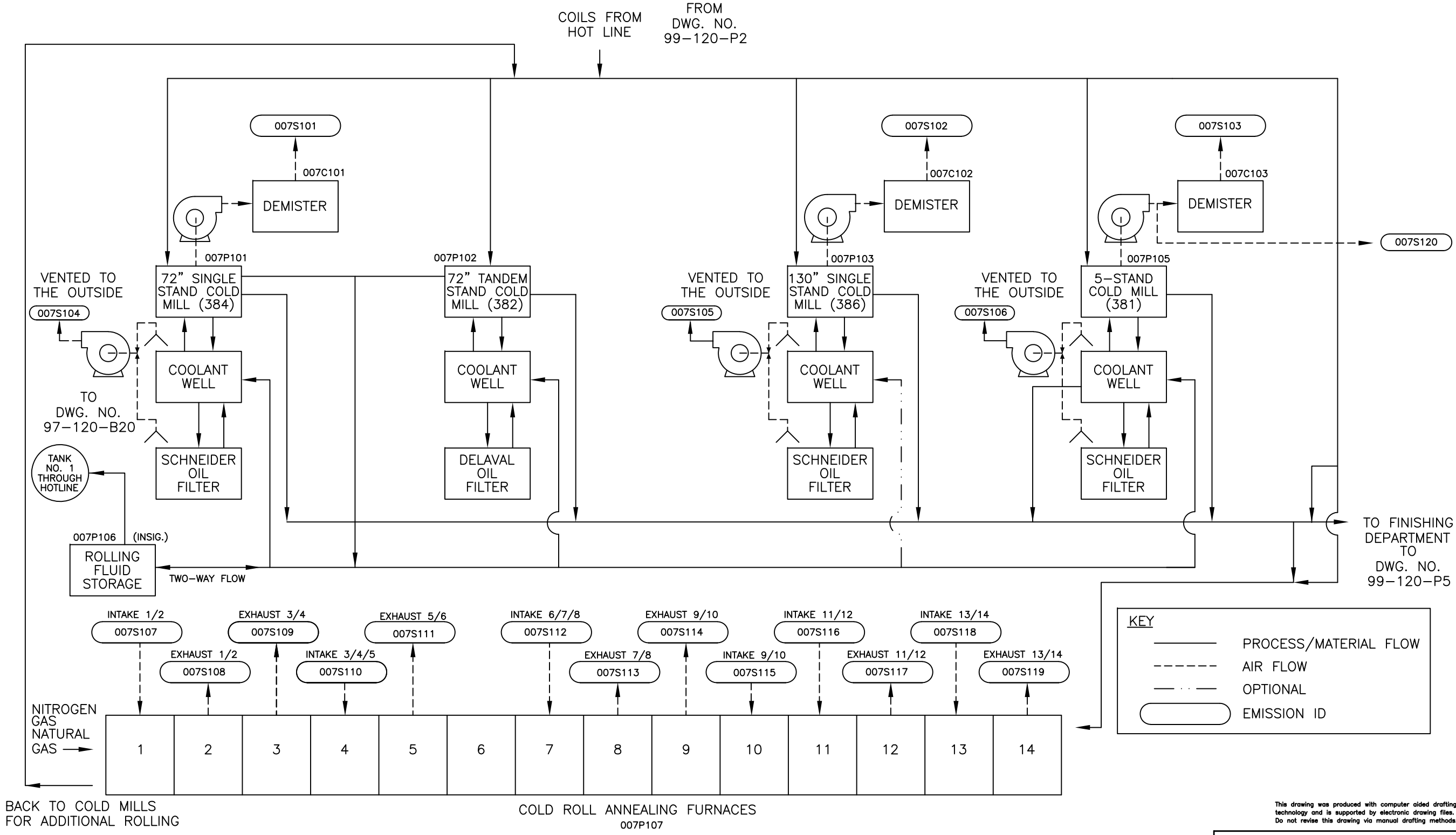
CONSTELLIUM ROLLED PRODUCTS, LLC
RAVENSWOOD OPERATIONS
45 CSR 30 OPERATING PERMIT APPLICATION

PROCESS FLOW DIAGRAM
EMISSION UNIT GROUP 002 HOT LINE
HOT LINE

SCALE: N.T.S.
DRAWN LMW | APPROVED SRK
CHECKED SRK | DATE 4/2/98
DRAWING NUMBER 99-120-P2
SHT. NO. 2 OF 7
REV

Project Integration, Inc.
116 Hidden Hill Road
Spartanburg, SC 29301

File No. 99-120-P2c



DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.

NO.	DESCRIPTION	APPVD.	DATE
3	APPLICATION UPDATE	RWF	2/19/18
2	APPLICATION UPDATE	RRP	12/07
1	APPLICATION UPDATE	SRK	4/2/98

REVISIONS

CONSTELLIUM ROLLED PRODUCTS, LLC
RAVENSWOOD OPERATIONS
45 CSR 30 OPERATING PERMIT APPLICATION

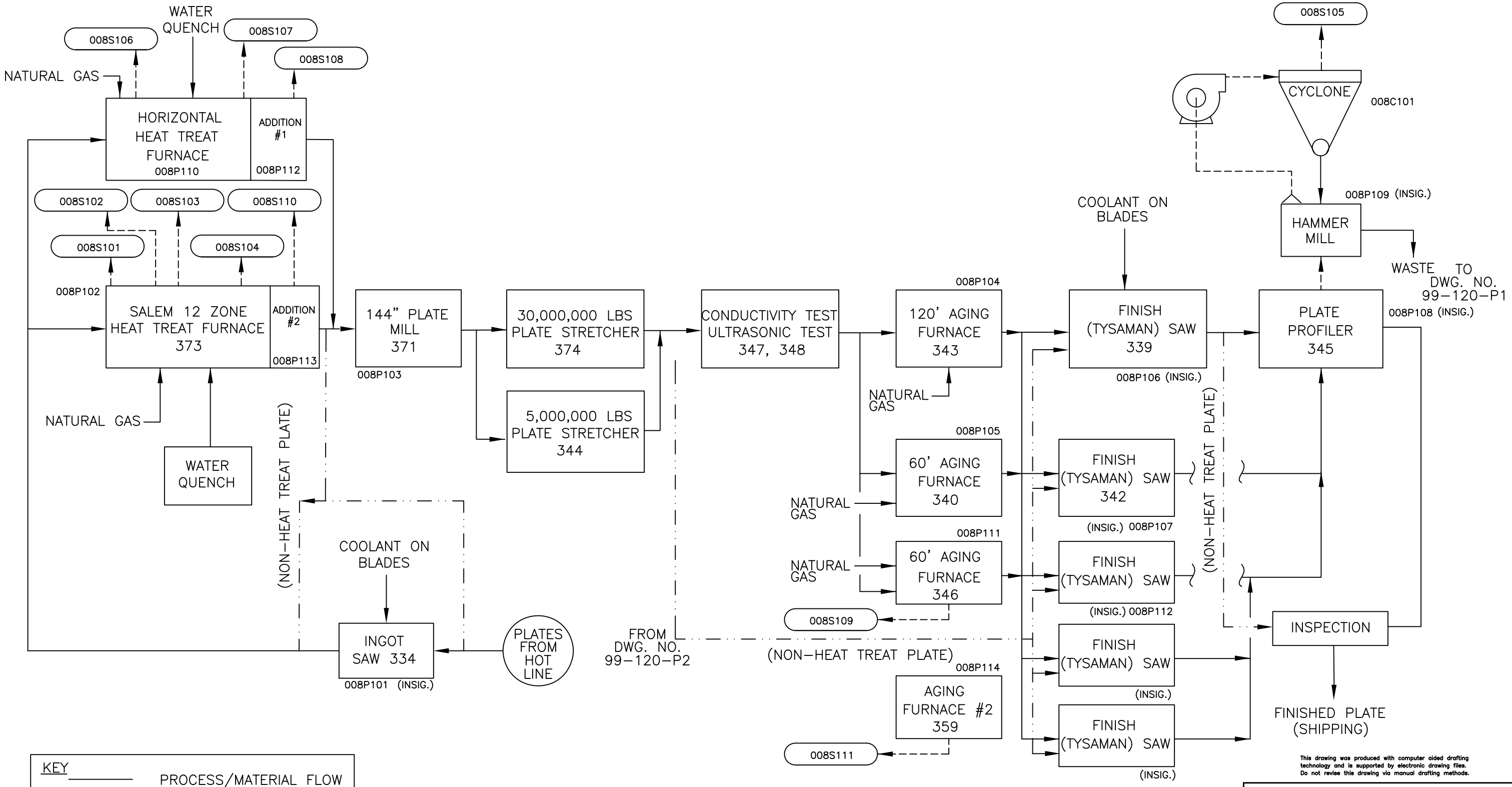
PROCESS FLOW DIAGRAM
EMISSION UNIT GROUP 003 COLD LINE
COLD LINE

SCALE: N.T.S.
DRAWN LMW
CHECKED SRK
APPROVED SRK
DATE 4/2/98
DRAWING NUMBER 99–120–P3
SHT. NO. 3 OF 7
REV

Project Integration, Inc.
116 Hidden Hill Road
Spartanburg, SC 29301

CAD FILE:

File No. 99–120–P3b



KEY

- PROCESS/MATERIAL FLOW
- AIR FLOW
- OPTIONAL
- EMISSION ID

DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

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CAD FILE:

NO.	DESCRIPTION	APPVD.	DATE
4	APPLICATION UPDATE	RWF	2/19/18
3	APPLICATION UPDATE	DWH	2/5/13
2	APPLICATION UPDATE	RRP	12/07
1	APPLICATION UPDATE	SRK	4/2/98

REVISIONS

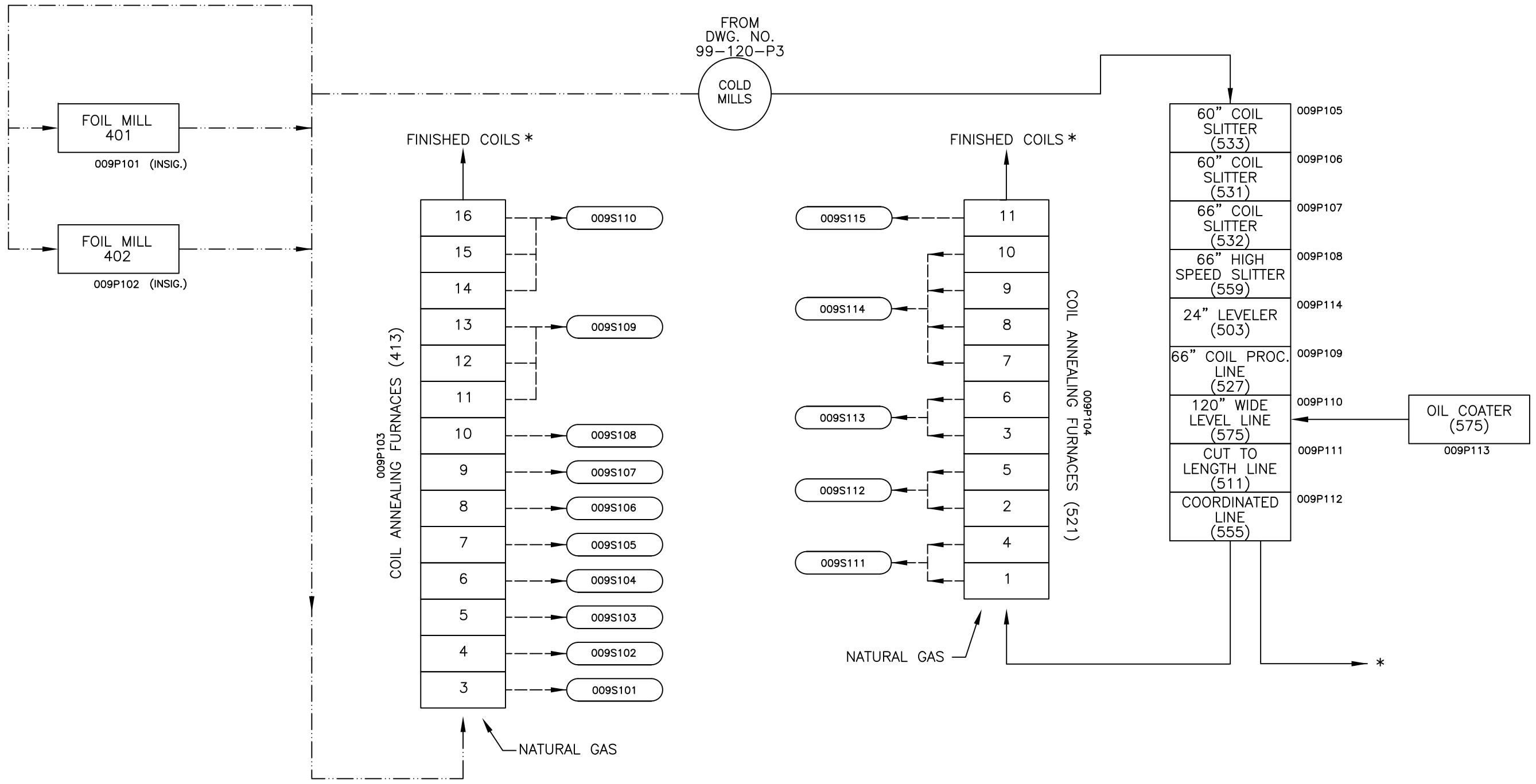
CONSTELLIUM ROLLED PRODUCTS, LLC
RAVENSWOOD OPERATIONS
45 CSR 30 OPERATING PERMIT APPLICATION

PROCESS FLOW DIAGRAM
EMISSION UNIT GROUP 004 PLATE DEPARTMENT
PLATE DEPARTMENT

SCALE: N.T.S.
DRAWN PAM
CHECKED SRK
APPROVED SRK
DATE 4/2/98
DRAWING NUMBER 99-120-P4
SHT. NO. 4 OF 7
REV

Project Integration, Inc.
116 Hidden Hill Road
Spartanburg, SC 29301

File No. 99-120-P4c



KEY

- PROCESS/MATERIAL FLOW
- AIR FLOW
- OPTIONAL
- EMISSION ID

* ALUMINUM PRODUCTS CAN BE SENT FROM THESE POINTS TO EITHER SHIPPING, COIL ANNEALING FURNACES, SLITTERS, OR BACK TO COLD LINE, OR BACK TO PLATE DEPARTMENT.

DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

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NO.	DESCRIPTION	APPVD.	DATE
3	APPLICATION UPDATE	RWF	2/19/18
2	APPLICATION UPDATE	RRP	12/07
1	APPLICATION UPDATE	SRK	4/2/98

REVISIONS

CONSTELLIUM ROLLED PRODUCTS, LLC
RAVENSWOOD OPERATIONS
45 CSR 30 OPERATING PERMIT APPLICATION

PROCESS FLOW DIAGRAM
EMISSION UNIT GROUP 005 FINISHING DEPARTMENT
FINISHING DEPARTMENT

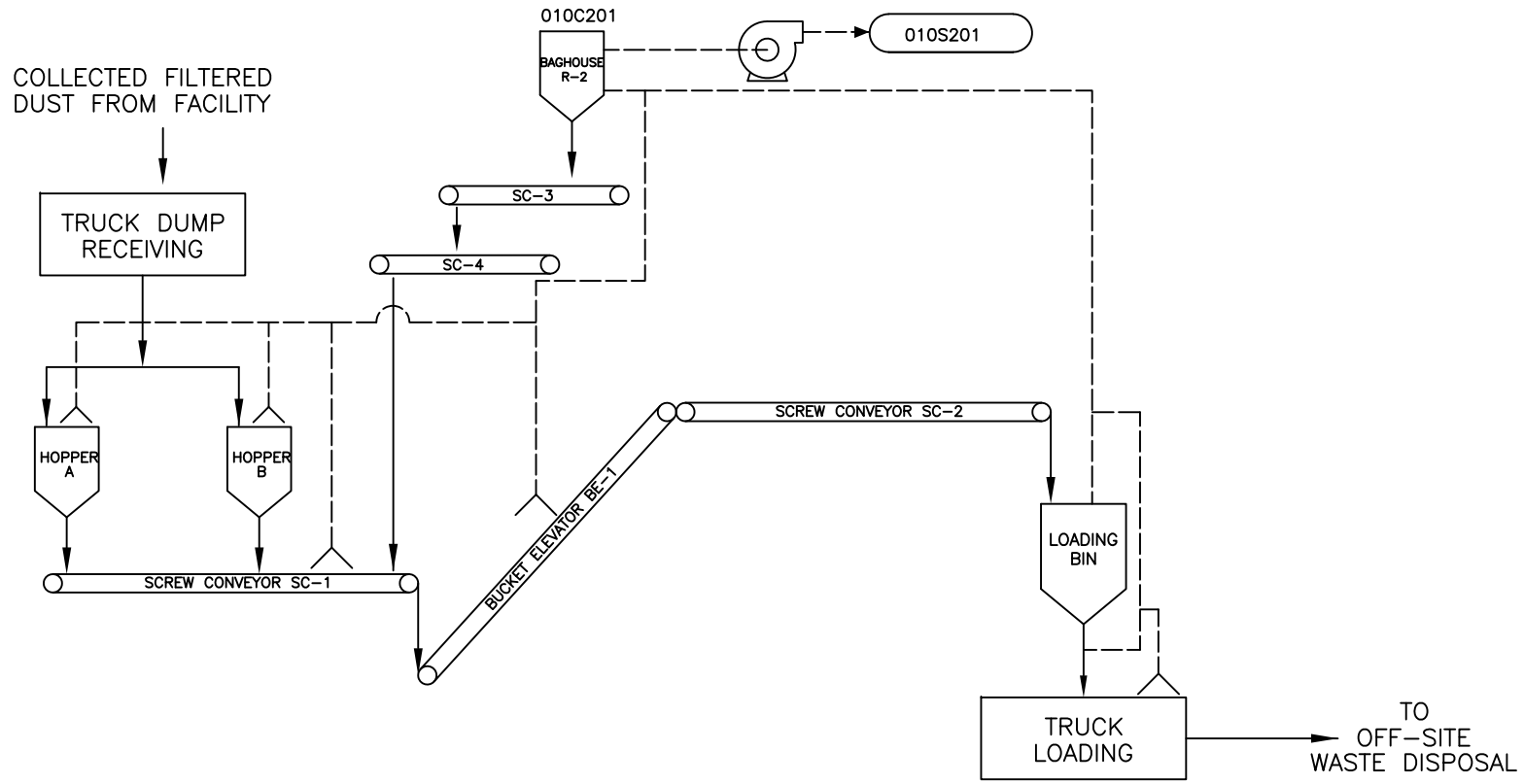
SCALE: N.T.S.
DRAWN LMW
CHECKED SRK
APPROVED SRK
DATE 4/2/98
DRAWING NUMBER 99-120-P5
SHT. NO. 5 OF 7
REV

Project Integration, Inc.
116 Hidden Hill Road
Spartanburg, SC 29301

CAD FILE:

File No. 99-120-P5b

DUST HANDLING FACILITY (010P201)



KEY

———— PROCESS/MATERIAL FLOW

– – – – – AIR FLOW

( ) EMISSION ID

DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

CAD FILE: _____

This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.

NO.	DESCRIPTION	APPVD.	DATE
3	APPLICATION UPDATE	RWF	2/19/18
2	APPLICATION UPDATE	RRP	12/07
1	APPLICATION UPDATE	SRK	4/2/98

REVISIONS

CONSTELLIUM ROLLED PRODUCTS, LLC
RAVENSWOOD OPERATIONS
45 CSR 30 OPERATING PERMIT APPLICATION

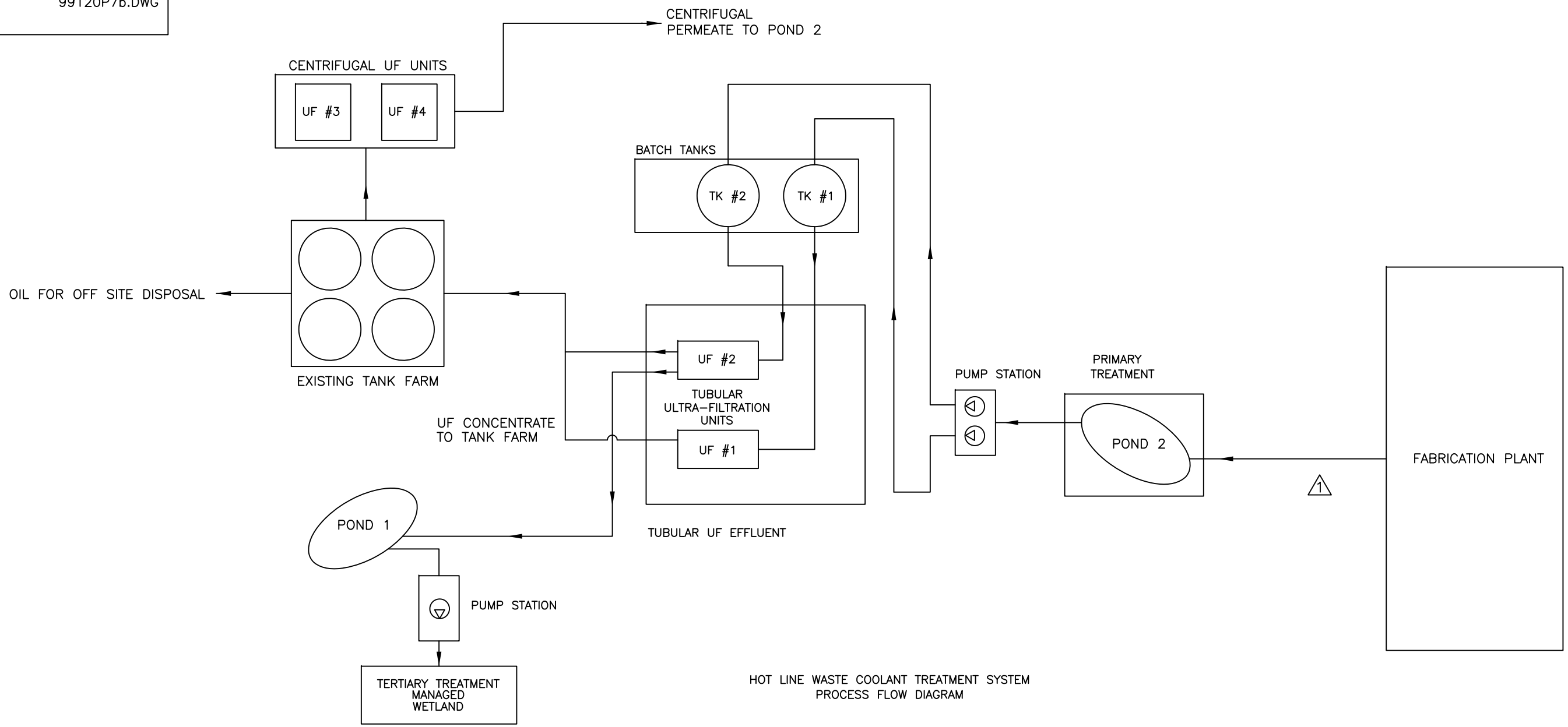
PROCESS FLOW DIAGRAM
EMISSION UNIT GROUP 006 MISCELLANEOUS SOURCES
MISCELLANEOUS SOURCES – SOUTH

SCALE: N.T.S.
DRAWN LMW
CHECKED SRK
APPROVED SRK
DATE 4/2/98
DRAWING NUMBER 99-120-P6
SHT. NO. 6 OF 7
REV

Project Integration, Inc.
116 Hidden Hill Road
Spartanburg, SC 29301

File No. 99-120-P6b

RRP 12/07 99120P7b.DWG



HOT LINE WASTE COOLANT TREATMENT SYSTEM
PROCESS FLOW DIAGRAM

KEY

———— PROCESS/MATERIAL FLOW

– – – – – AIR FLOW

( ) EMISSION ID

DRAWING REFERENCE: ORIGINAL DRAWING PRODUCED BY PARSONS ENGINEERING SCIENCE

* ALL EQUIPMENT INSIGNIFICANT FOR AIR PERMITTING

⚠1 REMOVE TANK ONE – 02/19/18

PROJECT MGR:	J. M. HENSON
PREPARED BY:	L. M. CLARK
DRAWN BY:	A. H. STEADMAN
CHECKED BY:	J. E. PETERSON
APPROVED BY:	
APPROVED BY:	
APPROVED BY:	
DATE:	MARCH 2001
JOB NO:	70126.17

Project Integration, Inc.
116 HIDDEN HILL ROAD
Spartanburg, SC 29301

ALCAN ROLLED PRODUCTS LLC

PROCESS FLOW DIAGRAM EMISSION UNIT

SCALE AS NOTED

FIGURE NO. 99–120–P7