



AIR QUALITY PROGRAM
836 Fulton Street
Pittsburgh, PA 15233-2124

Title V Operating Permit
& Federally Enforceable State Operating Permit

Issued To: Universal Stainless & Alloy
Products, Inc.

ACHD Permit #: 0027-OP25

Facility: Universal Stainless & Alloy
Products, Inc.
600 Mayer Street
Bridgeville, PA 15017

Date of Issuance: Month 00, 20XX

Expiration Date: Month 00, 20XX

Renewal Date: expiration date – 6mo.

Issued By: _____
JoAnn Truchan, P.E.
Program Manager, Engineering

Prepared By: _____
Reihaneh Etemadi
Air Quality Engineer

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DATE ***SECTION(S)***

DRAFT

I. CONTACT INFORMATION

Facility Location: Universal Stainless & Alloy Products, Inc.
600 Mayer Street
Bridgeville, PA 15017

Permittee/Owner: Universal Stainless & Alloy Products, Inc. an Aperam Company
600 Mayer Street
Bridgeville, PA 15017

Permittee/Operator: same as owner
(if not Owner)

Responsible Official: Michael Alderson
Title: Director of EH&S
Address: 2058 South Bailey Road
North Jackson, Ohio 44451
Telephone Number: (330) 599-7044
Fax Number: (330) 538-9792
Email: m.alderon@univstainless.com

Facility Contact: Joshua Warren
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AGENCY ADDRESSES:

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ACHD Contact: Program Manager, Engineering
Allegheny County Health Department
Air Quality Program
836 Fulton Street
Pittsburgh, PA 15233-2124
aqpermits@alleghenycounty.us

EPA Contact: ECAD – Air Section
Environmental Protection Agency
Four Penn Center
1600 John F. Kennedy Boulevard
Mail Code 3ED21
Philadelphia, PA 19103-2029

II. FACILITY DESCRIPTION

Universal Stainless & Alloy Products, Inc. - Bridgeville Plant (USAP – Bridgeville) produces specialty steel products in the form of long products and flat-rolled products including certain grades of electro-slag remelted steels (ESR) and vacuum-arc remelted (VAR) steels. The semi-finished long products are primarily used by the facility's customers to produce finished bar, rod, and wire products, and the semi-finished, flat-rolled products are used by customers to produce fine-gauge plate, sheet, and strip products. The finished bar products manufactured by the facility are primarily used by original equipment manufacturers and by service center customers for distribution to a variety of end users. The facility, located in Bridgeville, Allegheny County, Pennsylvania, is composed of one (1) electric arc furnace, one (1) argon-oxygen decarburization vessel, three (3) electro-slag remelt furnaces, one (1) hot rolling mill, and associated reheat and annealing furnaces.

The facility is a major source of carbon monoxide (CO), nitrogen oxides (NO_x), and particulate matter (PM), and is a minor source of particulate matter < 10 microns (PM₁₀), particulate matter < 2.5 microns (PM_{2.5}), sulfur oxides (SO_x), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs), as defined in Section 2101.20 of Article XXI. The facility is also a major source of greenhouse gas emissions (CO_{2e}) as defined in the U.S. EPA Greenhouse Gas Tailoring Rule.

The emission units regulated by this permit are summarized in Table II-1:

TABLE II-1: Emission Unit Identification

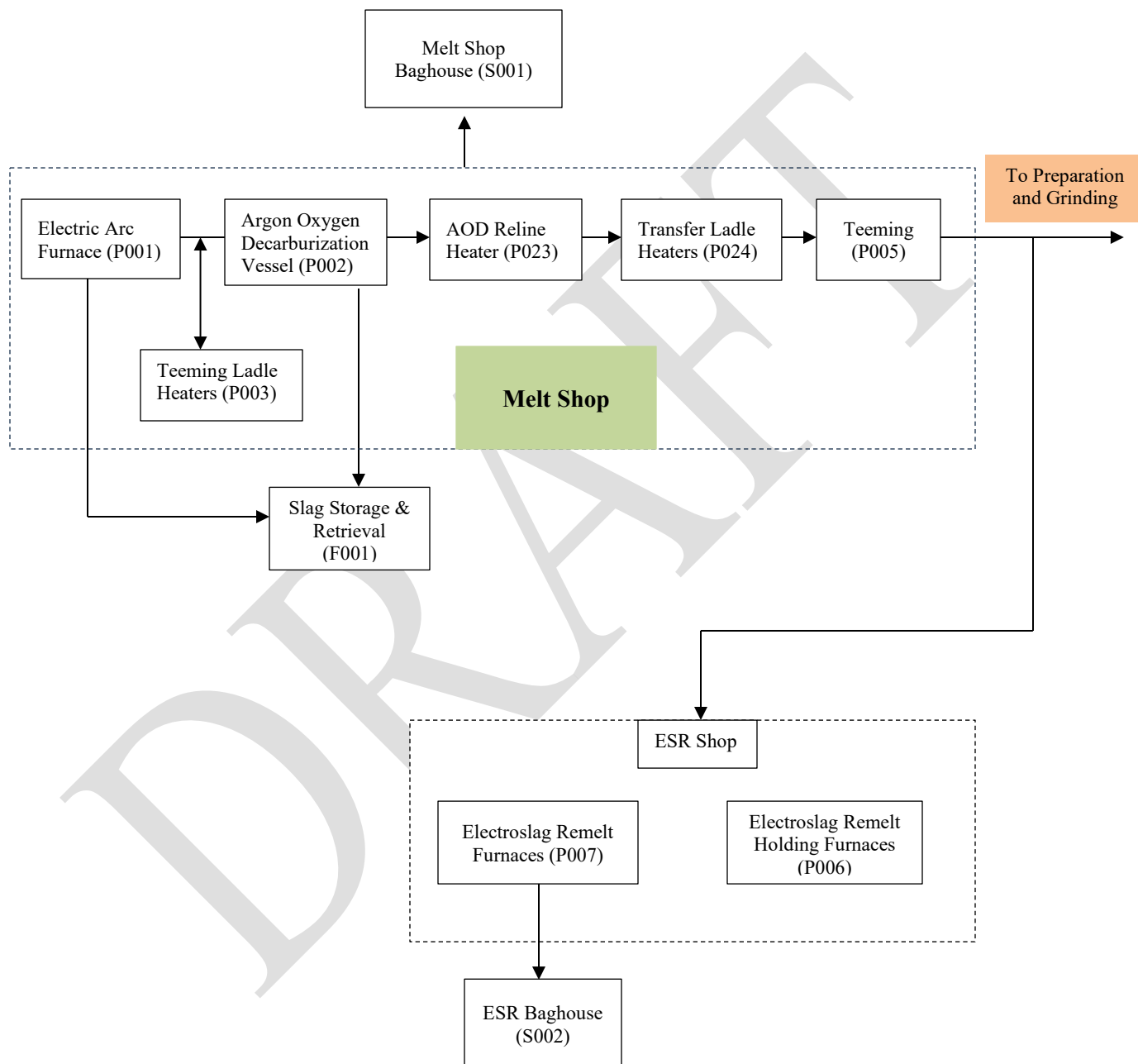
I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P001	Electric Arc Furnace (EAF)	Melt Shop Baghouse	23.14 TPH 175,200 TPY	Steel Scrap, Limestone, Alloy Elements	S001
P002	Argon-Oxygen Decarburization (AOD) Vessel	Melt Shop Baghouse	35.5 TPH 175,200 TPY	Molten Steel, Scrap Steel, Alloy Elements, Flux	S001
P003	(2) Teeming Ladle Heaters	None	17.8 MMBtu/hr	Natural Gas	S001
P005	Teeming	Melt Shop Baghouse	60 TPH 175,200 TPY	Molten Steel	S001
P006	(2) Electro-Slag Remelt Holding Furnaces	None	7.0 MMBtu/hr	Natural Gas	N/A
P007	Electro-Slag Remelt Furnaces: (4) Furnaces (A-left, A-right, B, and C)	ESR Baghouse	7 TPH 61,320 TPY	Alloy, Steel Ingots, Slag	S002
P010	Hot Rolling/Blooming Mill	None	104,000 TPY	Alloy, Steel Ingots	N/A
P011	Annealing Furnaces	Low NO _x Burners	25 units (184.34 MMBtu/hr)	Natural Gas	N/A

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P012	Reheat Furnaces	Low NO _x Burners	19 units (187.2 MMBtu/hr)	Natural Gas	N/A
P018	Plate Warming Furnace	None	7.0 MMBtu/hr	Natural Gas	N/A
P023	AOD Relining Heater	None	8.9 MMBtu/hr	Natural Gas	S001
P024	Transfer Ladle Heater	None	8.9 MMBtu/hr	Natural Gas	S001
G001	(5) Circulating Water Cooling Towers	Mist Eliminators	Melt Shop – 2,800 gpm, ESR towers – 834 gpm, each, VAR tower – 500 gpm	Cooling Water	N/A
B001	Miscellaneous Space Heaters (112 units)	None	13.53 MMBtu/hr Total units	Natural Gas	N/A
F002	Plant Roads	Wet Suppression, Chemical Treatment, Paved Road Sweeping	N/A	N/A	N/A
SOURCES OF MINOR SIGNIFICANCE AND/OR TRIVIAL PROCESSES OR ACTIVITIES					
P013	(2) Gantry Grinders	Integral Particulate Control Device	8 TPH 9,000 TPY	Alloy, Steel Billets, Ingots	N/A
P015	(4) Midwest Grinders, plus one spare	Grinder Building Baghouse	10 TPH each 87,600 TPY	Alloy, Steel Billets, Ingots	S004
P019	Western Gear Billet Grinder	Western Gear Grinder Baghouse	6.8 TPH 60,000 TPY	Alloy and Steel Billets	S003
P020	Pangborn ES-1850 Crucible Cleaning System	PC02-4 Pangborn Cartridge Collector	-	-	-
P021	CONSARC Vacuum Arc Remelt (VAR) Furnace	-	-	-	-
P022	Vulcan Ingot-End Grinder	Dust Collector	16 TPH 140,160 TPY	Alloy Steel Billets	S005

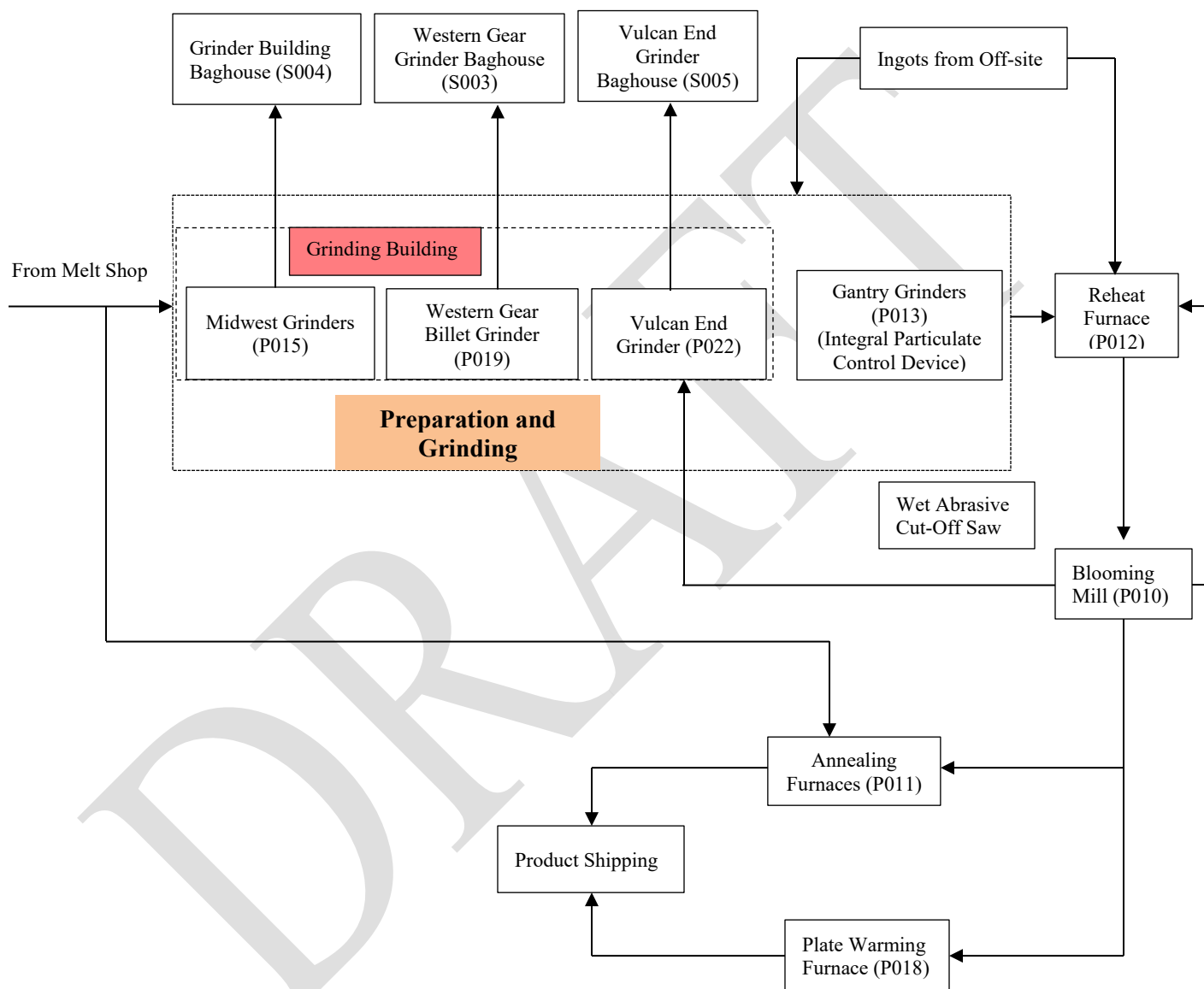
I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
ACHD #5	Three (3) electrically heated laboratory ovens in sample preparation area	-	-	-	-
ACHD #17, 18, 21	Plant maintenance and vehicle repair facilities (general repairs, welding, non-solvent cleaning, and metal cutting)	-	-	-	-
ACHD #20	Handheld equipment for occasional surface grinding or surface finishing of steel products to remove surface imperfections	-	-	-	-
ACHD #39, 40, 41	Bench-scale laboratory equipment for chemical analysis of steel (four electrically operated element analyzers)	-	-	-	-
ACHD #42	Sampling equipment to withdraw and prepare specimens for analysis: (5) sample saws (2) sample drill presses (7) belt sanders (1) grinder wheel unit (2) wet surface grinders (3) metallographic wet sample polishers (2) sample machining lathes	-	-	-	-
D002	Diesel Storage Tank	-	1,000 gallons	Diesel	-
D003	Diesel Storage Tank	-	300 gallons	Diesel	-
D004	Waste Oil Tank	-	1,000 gallons	Waste Oil	-
D005	Quench Tank for Clam Shell Furnace Bar or Plate	-	-	-	-
DG001	Cold Degreaser Tub	-	250 gallons	Degreaser	-
-	ESR Stub Welding	-	-	-	-
-	Transfer Ladle/Vessel Warming Torches	-	-	-	-
-	Wet Abrasive Cut-Off Saw	-	-	-	-
-	Acid Etching of Laboratory Samples	-	-	-	-

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
-	Spectrum Detroit Diesel Three-Phase 60 kw Emergency Generator	-	-	Diesel	-
-	Electro-Slag Remelt Preheat Belchfire Torches (three)	-	-	-	-
E001	Lime Storage Silo	-	-	Lime	-
F001	Melt Shop Slag Pile	-	-	Slag	-

Process Flow Diagram



Process Flow Diagram



DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.

III. GENERAL CONDITIONS – Major Source**1. Prohibition of Air Pollution (§2101.11)**

- a. It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:
 - 1) Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
 - 2) Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
 - 3) May reasonably be anticipated to endanger the public health, safety, or welfare.
- b. It shall be a violation of this permit to operate, or allow to be operated, any source in such manner as to allow the release of air contaminants into the open air or to cause air pollution as defined in Article XXI, except as is explicitly permitted by this permit or Article XXI.

2. Definitions (§2101.20)

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.

- b. Unless specified otherwise in this permit or in the applicable regulation, the term “year” shall mean any twelve (12) consecutive months.
- c. “RACT Order No. 241” shall be defined as Plan Approval Order and Agreement No. 241 Upon Consent, dated December 20, 1996.

3. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

4. Certification (§2102.01)

Any report, or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Transfers (§2102.03.e)

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b. The required documentation and fee must be received by the Department at least 30 days before the intended transfer date.

6. Term (§2103.12.e, §2103.13.a)

- a. This permit shall remain valid for five (5) years from the date of issuance, or such other shorter period if required by the Clean Air Act, unless revoked. The terms and conditions of an expired permit shall automatically continue pending issuance of a new operating permit provided the permittee has submitted a timely and complete application and paid applicable fees required under Article XXI Part C, and the Department through no fault of the permittee is unable to issue or deny a new permit before the expiration of the previous permit.
- b. Expiration. Permit expiration terminates the source’s right to operate unless a timely and complete renewal application has been submitted consistent with the requirements of Article XXI Part C.

7. Need to Halt or Reduce Activity Not a Defense (§2103.12.f.2)

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

8. Property Rights (§2103.12.f.4)

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

9. Duty to Provide Information (§2103.12.f.5)

- a. The permittee shall furnish to the Department in writing within a reasonable time, any information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of any records required to be kept by the permit.
- b. Upon cause shown by the permittee the records, reports, or information, or a particular portion thereof, claimed by the permittee to be confidential shall be submitted to the Department in accordance with the requirements of Article XXI, §2101.07.d.4. Information submitted to the Department under a claim of confidentiality, shall be available to the US EPA and the PADEP upon request and without restriction. Upon request of the permittee the confidential information may be submitted to the USEPA and PADEP directly. Emission data or any portions of any draft, proposed, or issued permits shall not be considered confidential.

10. Modification of Section 112(b) Pollutants which are VOCs or PM₁₀ (§2103.12.f.7)

Except where precluded under the Clean Air Act or federal regulations promulgated under the Clean Air Act, if this permit limits the emissions of VOCs or PM₁₀ but does not limit the emissions of any hazardous air pollutants, the mixture of hazardous air pollutants which are VOCs or PM₁₀ can be modified so long as no permit emission limitations are violated. A log of all mixtures and changes shall be kept and reported to the Department with the next report required after each change.

11. Right to Access (§2103.12.h.2)

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized Department and other federal, state, county, and local government representatives to:

- a. Enter upon the permittee's premises where a permitted source is located or an emissions-related activity is conducted, or where records are or should be kept under the conditions of the permit;
- b. Have access to, copy and remove, at reasonable times, any records that must be kept under the conditions of the permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. As authorized by either Article XXI or the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.

12. Certification of Compliance (§2103.12.h.5)

- a. The permittee shall submit on an annual basis, certification of compliance with all terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification of compliance shall be made consistent with General Condition III.4 above and shall include the following information at a minimum:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
 - 2) The compliance status;
 - 3) Whether any noncompliance was continuous or intermittent;
 - 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the provisions of this permit; and
 - 5) Such other facts as the Department may require to determine the compliance status of the source.
- b. All certification of compliance forms must be submitted to the Administrator as well as the Department by March 2 of each year for the time period beginning January 1 of the previous year and ending December 31 of the same year. Compliance certifications should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us. Compliance certifications may be emailed to the Administrator at R3_APD_Permits@epa.gov in lieu of mailing a hard copy.

13. Record Keeping Requirements (§2103.12.j.1)

- a. The permittee shall maintain records of required monitoring information that include the following:
- 1) The date, place as defined in the permit, and time of sampling or measurements;
 - 2) The date(s) analyses were performed;
 - 3) The company or entity that performed the analyses;
 - 4) The analytical techniques or methods used;
 - 5) The results of such analyses; and
 - 6) The operating parameters existing at the time of sampling or measurement.
- b. The permittee shall maintain and make available to the Department, upon request, records including computerized records that may be necessary to comply with the reporting and emission statements in Article XXI §2108.01.e. Such records may include records of production, fuel usage, maintenance of production or pollution control equipment, or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

14. Retention of Records (§2103.12.j.2)

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 the monitoring sample, measurement, report, or application. 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 this permit.

15. Reporting Requirements (§2103.12.k)

- a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.
- b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of

such deviations, and any corrective actions or preventive measures taken.

- c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
 - 1) One semiannual report is due by January 31 of each year for the time period beginning July 1 through December 31 of the previous year.
 - 2) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30 of the same year.
- e. Reports should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

16. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

17. Existing Source Reactivations (§2103.13.d)

The permittee shall not reactivate any source that has been out of operation or production for a period of one year or more unless the permittee has submitted a reactivation plan request to, and received a written reactivation plan approval from, the Department. Existing source reactivations shall meet all requirements of Article XXI §2103.13.d.

18. Administrative Permit Amendment Procedures (§2103.14.b)

An administrative permit amendment may be made consistent with the procedures of Article XXI §2103.14.b and §2103.24.b. Administrative permit amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations there under.

19. Revisions and Minor Permit Modification Procedures (§2103.14.c)

Sources may apply for revisions and minor permit modifications on an expedited basis in accordance with Article XXI §2103.14.c and §2103.24.a.

20. Significant Permit Modifications (§2103.14.d)

Significant permit modifications shall meet all requirements of the applicable subparts of Article XXI, Part C, including those for applications, fees, public participation, review by affected States, and review by EPA, as they apply to permit issuance and permit renewal. The approval of a significant permit modification, if the entire permit has been reopened for review, shall commence a new full five (5) year permit term. The Department shall take final action on all such permits within nine (9) months following receipt of a complete application.

21. Duty to Comply (§2103.12.f.1)

The permittee shall comply with all permit conditions and all other applicable requirements at all times. Any permit noncompliance constitutes a violation of the Clean Air Act, the Air Pollution Control Act, and Article XXI and is grounds for any and all enforcement action, including, but not limited to, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

22. Renewals (§2103.13.b.)

Renewal of this permit is subject to the same fees and procedural requirements, including those for public participation and affected State and EPA review, that apply to initial permit issuance. The application for renewal shall be submitted at least six (6) months but not more than eighteen (18) months prior to expiration of this permit. The application shall also include submission of a supplemental compliance review as required by Article XXI §2102.01.

23. Reopenings for Cause (§2103.12.f.3, §2103.25.a)

- a. This permit shall be reopened and reissued under any of the following circumstances
 - 1) Additional requirements under the Clean Air Act become applicable to a major source with a remaining permit term of three (3) or more years. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended solely due to the failure of the Department to act on a permit renewal application in a timely fashion.
 - 2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.
 - 3) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
 - 4) The Administrator or the Department determines that this permit must be reissued or revoked to assure compliance with the applicable requirements.
- b. This permit may be modified; revoked, reopened, and reissued; or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in this permit.

24. Reopenings for Cause by the EPA (§2103.25.b)

This permit may be modified, reopened and reissued, revoked or terminated for cause by the EPA in accordance with procedures specified in Article XXI §2103.25.b.

25. Annual Operating Permit Maintenance Fee (§2103.40)

In each year during the term of this permit, on or before December 31 of each year for the next calendar year, the permittee shall submit to the Department, in addition to any other applicable administration fees, an Annual Operating Permit Maintenance Fee in accordance with §2103.40. by check or money order payable to the “Allegheny County Air Pollution Control Fund” in the amount specified in the fee schedule applicable at that time.

26. Annual Major Source Emissions Fees Requirements (§2103.41)

No later than September 1 of each year, the permittee shall pay an annual emission fee in accordance with Article XXI §2103.41 for each ton of a regulated pollutant (except for carbon monoxide) actually emitted from the source. The permittee shall not be required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant. The emission fee shall be increased in each year after 1995 by the percentage, if any, by which the Consumer Price Index for the most recent calendar year exceeds the Consumer Price Index for the previous calendar year.

27. Other Requirements not Affected (§2104.08, §2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable Federal, State, or County statute, rule, regulation, or the like, including but not limited to the odor emission standards under Article XXI §2104.04, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology (GACT) standards now or hereafter established by the EPA, and any applicable requirements of BACT or LAER as provided by Article XXI, any condition contained in any applicable Installation or Operating Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Article XXI Part I.

28. Termination of Operation (§2108.01.a)

In the event that operation of any source of air contaminants is permanently terminated, the person responsible for such source shall so report, in writing, to the Department within 60 days of such termination.

29. Tests by the Department (§2108.02.d)

Notwithstanding any tests conducted pursuant to Article XXI §2108.02, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

30. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit.

31. Enforcement and Emergency Orders (§2109.03, §2109.05)

- a. The person responsible for this source shall be subject to any and all enforcement and emergency orders issued to it by the Department in accordance with Article XXI §2109.03, §2109.04 and §2109.05.
- b. Upon request, any person aggrieved by an Enforcement Order or Emergency Order shall be granted a hearing as provided by Article XXI §2109.03.d; provided however, that an Emergency Order shall continue in full force and effect notwithstanding the pendency of any such appeal.
- c. Failure to comply with an Enforcement Order or immediately comply with an Emergency Order shall be a violation of this permit thus giving rise to the remedies provided by Article XXI §2109.02.

32. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this permit when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have this permit revoked for failure to pay any fee required.

33. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI or any unsuccessful petitioner to the Administrator under Article XXI Part C, Subpart 2, shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

34. Risk Management (§2104.08, 40 CFR Part 68)

Should this stationary source, as defined in 40 CFR Part 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Part 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by General Condition III.12 above.

35. Operational Flexibility (§2103.14.a)

- a. The owner or operator shall not make any changes at this source, including trades of increases and decreases in emissions within the permitted source, without first obtaining a permit revision for such changes, unless:
 - 1) The changes do not require an Installation Permit under §2102.04 of this Article or violate the terms of an Operating Permit or an Installation Permit;
 - 2) The permit specifically allows for changes that do not cause specific emissions increases greater than a de minimis emission increase, and the changes do not exceed such emissions increase allowed under the permit, in accordance with General Condition III.36 below;
 - 3) The changes do not violate major source applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements; and

- 4) By no later than seven (7) days prior to the date on which the implementation of the proposed change is commenced, a written notification is submitted to the Department, for attachment to the Department's copy of the relevant permit, which includes:
 - a) A brief description of the change within the permitted source;
 - b) The date on which the change will occur;
 - c) The pollutants emitted; and
 - d) Any change in emissions.

36. De Minimis Emission Increases (§2103.14.e)

- a. The Department may allow, as a condition of an Operating Permit, *de minimis* emission increases from a new or existing source up to the amounts authorized in condition III.36.d below.
- b. A *de minimis* increase may not occur at a source if it either:
 - 1) Increases the emissions of a pollutant regulated under Section 112 of the Clean Air Act (42 U.S.C.A. §7412) except as authorized in conditions III.36.d.4) and 5) below;
 - 2) Subjects the source to the permit requirements of Article XXI, §§2102.05, 2102.06, or 2102.07 (relating to prevention of significant deterioration of air quality and major new source and major modification review); or
 - 3) Violates an applicable requirement of this Article, the state Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under the Air Pollution Control Act or the Clean Air Act.
- c. The permittee shall provide the Department with seven (7) days prior written notice of any *de minimis* emission increase. The notice shall identify and describe the pollutants that will be emitted as a result of the *de minimis* emissions increase and provide emission rates in tons/year and in terms necessary to establish compliance consistent with any applicable requirement. The Department may disapprove or condition the *de minimis* emission increase at any time.
- d. Except as provided in condition III.36.e below, the maximum *de minimis* emission rate increases, as measured in tons/year, that may be authorized in the permit during the term of the permit are:
 - 1) Four (4) tons of carbon monoxide from an emissions unit during the term of the permit and 20 tons of carbon monoxide at the source during the term of the permit;
 - 2) One (1) ton of NO_x from an emissions unit during the term of the permit and five (5) tons of NO_x at the source during the term of the permit;
 - 3) One and six-tenths tons of oxides of sulfur from an emissions unit during the term of the permit and 8.0 tons of oxides of sulfur at the source during the term of the permit;
 - 4) Six-tenths of a ton of PM₁₀ from an emissions unit during the term of the permit and 3.0 tons of PM₁₀ at the source during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder, or Article XXI; and
 - 5) One (1) ton of VOC's from an emissions unit during the term of the permit and five (5) tons of VOC's at the source during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder, or Article XXI.
- e. The Department may allow, as a condition of an operating permit, installation of the minor sources exempted under §2102.04.a.5 of Article XXI.

- f. *De minimis* emission threshold levels cannot be met by offsetting emission increases with emission decreases at the same emissions unit.

37. Circumvention (§2101.14)

For purposes of determining compliance with the provisions of this permit and Article XXI, no credit shall be given to any person for any device or technique, including but not limited to the operation of any source with unnecessary amounts of air, the combining of separate sources except as specifically permitted by Article XXI and the Department, the use of stacks exceeding Good Engineering Practice height as defined by regulations promulgated by the US EPA at 40 CFR §§51.100 and 51.110 and Subpart I, and other dispersion techniques, which without reducing the amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise violate the provisions of this Article; except that, for purposes of determining compliance with Article §2104.04 concerning odors, credit for such devices or techniques, except for the use of a masking agent, may be given.

38. Duty to Supplement and Correct Relevant Facts (§2103.11.d.2)

- a. The permittee shall provide additional information as necessary to address requirements that become applicable to the source after the date it files a complete application but prior to the Department taking action on the permit application.
- b. The permittee shall provide supplementary fact or corrected information upon becoming aware that incorrect information has been submitted or relevant facts were not submitted.
- c. Except as otherwise required by this permit and Article XXI, the Clean Air Act, or the regulations thereunder, the permittee shall submit additional information as necessary to address changes occurring at the source after the date it files a complete application but prior to the Department taking action on the permit application.
- d. The applicant shall submit information requested by the Department which is reasonably necessary to evaluate the permit application.

39. Effect (§2102.03.g.)

- a. Except as specifically otherwise provided under Article XXI, Part C, issuance of a permit pursuant to Article XXI Part B or Part C shall not in any manner relieve any person of the duty to fully comply with the requirements of this permit, Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of this permit or Article XXI, whether occurring before or after the issuance of such permit. Further, except as specifically otherwise provided under Article XXI Part C the issuance of a permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of this permit or Article XXI.

40. Installation Permits (§2102.04.a.1.)

It shall be a violation of this permit giving rise to the remedies set forth in Article XXI Part I for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment which would require an installation permit or permit modification in accordance with Article XXI Part B or Part C.

IV. SITE LEVEL TERMS AND CONDITIONS

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
- b. Equal or exceed an opacity of 60% at any time.

3. Odor Emissions (§2104.04) (*County-only enforceable*)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line of such source. In addition, the Department may pursue the remedies provided by §2109.02 for any violation of this Section.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

7. Shutdown of Control Equipment (§2108.01.b)

- a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment is shut down.
- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.
- c. The prior report required by Site Level Condition IV.7.a above shall include:
 - 1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
 - 2) The reasons for the shutdown;
 - 3) The expected length of time that the equipment will be out of service;
 - 4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
 - 5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
 - 6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
 - 7) Such other information as may be required by the Department.
- d. Written notice required by this condition should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

8. Breakdowns (§2108.01.c)

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.
- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
 - 1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.

- 2) The nature and probable cause of the breakdown.
 - 3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
 - 4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
 - 5) The estimated quantity of each material being or likely to be emitted.
 - 6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
 - 7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.
- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.
- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.
- g. Written notice required by this condition should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

9. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant. Cold start notifications should be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice should be sent to the Department at aqreports@alleghenycounty.us.

10. Emissions Inventory Statements (§2108.01.e & g)

- a. Emissions inventory statements in accordance with Article XXI §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.
- b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

11. Orders (§2108.01.f)

In addition to meeting the requirements of General Condition III.28 and Site Level Conditions IV.7 through IV.10 above, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

12. Violations (§2108.01.g)

The failure to submit any report or update thereof required by General Condition III.28 and Site Level Conditions IV.7 through IV.11 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

13. Emissions Testing (§2108.02)

- a. **Orders:** The person responsible for any source shall, upon order by the Department, conduct, or cause to be conducted, such emissions tests as specified by the Department within such reasonable time as is specified by the Department. Test results shall be submitted in writing to the Department within 20 days after completion of the tests, unless a different period is specified in the Department's order. Emissions testing shall comply with all applicable requirements of Article XXI §2108.02.e.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the

tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.
- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Abrasive Blasting (§2105.51)

- a. Except where such blasting is a part of a process requiring an operating permit, no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.
- b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

15. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

16. Protection of Stratospheric Ozone (40 CFR Part 82)

- a. Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - 1) All containers in which a Class I or Class II substance is stored or transported, all products containing a Class I substance, and all products directly manufactured with a process that uses a Class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106;
 - 2) The placement of the required warning statement must comply with the requirements pursuant to §82.108;
 - 3) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110; and
 - 4) No person may modify, remove or interfere with the required warning statement except as described in §82.112.

- b. Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F:
 - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156;
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
 - 3) Persons maintaining, servicing, repairing or disposing of appliances, must be certified by an approved technician certification program pursuant to §82.161;
 - 4) Persons disposing of small appliances, motor vehicle air conditioners (MVAC) and MVAC-like appliances, must comply with the record keeping requirements pursuant to §82.166;
 - 5) Owners of commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
 - 6) Owners or operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- c. If the permittee manufactures, transforms, destroys, imports or exports a Class I or Class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A (Production and Consumption Controls).
- d. If the permittee performs a service on a motor vehicle that involves an ozone-depleting substance, refrigerant or regulated substitute substance in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B (Servicing of Motor Vehicle Air Conditioners).
- e. The permittee may switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G.

17. Volatile Organic Compound Storage Tanks (§2105.12.a)

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

18. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

- a. The use of asphalt, oil, water, or suitable chemicals for dust control;
- b. The paving and maintenance of roadways, parking lots and the like;
- c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;

- d. The adoption of work or other practices to minimize emissions;
- e. Enclosure of the source; and
- f. The proper hooding, venting, and collection of fugitive emissions.

19. Episode Plans (§2106.02)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02 and Article XXI Part F.

20. New Source Performance Standards (§2105.05)

- a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.
- b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

21. National Emission Standards for Hazardous Air Pollutants (§2104.08)

- a. The permittee shall comply with each applicable emission limitation, work practice standard, and operation and maintenance requirement of 40 CFR Part 63, Subpart YYYYYY – *National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities*.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS**A. Process P001: Electric Arc Furnace**

Process Description:	Electric Arc Furnace (EAF)
Facility ID:	P001
Max. Design Rate:	23.14 tons steel/hr
Capacity:	63 tons/heat
Raw Materials:	Steel Scrap, Limestone, Alloying Elements
Control Device:	Melt Shop Baghouse
Stack I.D.:	S001

1. Restrictions:

- a. The permittee shall not cause to be discharged into the atmosphere from the EAF any gases which: [§60.272(a); §63.10686(b)(1); §63.10686(b)(2); §2103.12.a.2.B]
 - 1) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);
 - 2) Exit from a control device and exhibit 3% opacity or greater; and
 - 3) Exit from a shop and, due solely to the operations of the EAF(s), exhibit 6% opacity or greater.
- b. The permittee shall not cause to be discharged into the atmosphere from the dust-handling system any gases that exhibit 10 % opacity or greater. [§2103.12.a.2.B; 60.272(b)]
- c. The permittee shall at no time conduct Melt Shop process operations unless the Melt Shop pollution control equipment is properly maintained and operated according to the following conditions: [§2103.12.a.2.B; OP #7037009-000-16400; OP #7037009-000-16401]
 - 1) The fugitive emissions capture equipment shall consist of a canopy hood system ducted to the Melt Shop Baghouse and closed-roof scavenger points ducted to the Melt Shop Baghouse.
 - 2) The EAF shall be equipped with a canopy hood for collection of process emissions and such hood shall be properly maintained and always operated with all captured emissions ducted to the Melt Shop Baghouse.
 - 3) The particulate control efficiency of the baghouse shall be always a minimum of 98.3% while the subject process equipment is producing particulate emissions.
 - 4) The differential pressure drop across each baghouse compartment shall be between 2" and 13" w.c., inclusive, or, as established during the most recent test required by Condition V.A.2.a, measured to the nearest ½" w.c.
- d. The production of steel at the EAF shall not exceed 175,200 tons of steel in any consecutive 12-month period. The production in any one heat shall not exceed 63 tons. [OP #7037009-000-16400; IP #0027-I010, V.A.1.c; §2103.12.a.2.B & D]
- e. Emissions from the Melt Shop Baghouse shall not exceed the emissions limitations in Table V-A-1 below. The Melt Shop emission limitations include emissions from the Electric Arc Furnace, AOD, and teeming. [IP #0027-I010, V.A.1.d; §2103.12.a.2.B & D]

TABLE V-A-1: Melt Shop Emission Limitations (Baghouse)

POLLUTANT	HOURLY EMISSION LIMIT (lb/hr)	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter	17.70	63.62
PM ₁₀	12.59	45.04
PM _{2.5}	1.26	4.50
Sulfur Oxides	1.62	6.13
Nitrogen Oxides	7.64	28.03
Carbon Monoxide	88.95	315.36
Volatile Organic Compounds	8.22	30.84
Chromium	0.37	1.64
Nickel	0.16	0.72
Lead	0.016	0.07

* A year is defined as any consecutive 12-month period.

- f. (a) *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF at the facility, the permittee shall comply with the requirements in either Condition V.A.1.f.1), or V.A.1.f.2) below. The permittee may have certain scrap at the facility subject to Condition V.A.1.f.1) and other scrap subject to Condition V.A.1.f.2) below provided the scrap remains segregated until charge makeup. [§63.10685(a); §2103.12.a.2.B]
- 1) *Pollution prevention plan.* For the production of steel other than leaded steel, the permittee shall prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, the permittee shall prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. The permittee shall submit the scrap pollution prevention plan to the permitting authority for approval. The permittee shall operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. The permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permittee shall keep a copy of the plan onsite, and the permittee shall provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan shall include the information in Conditions V.A.1.f.1)a) through V.A.1.f.1)c) below: [§ 63.10685(a)(1)]
- a) Specifications that scrap materials shall be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace. [§ 63.10685(a)(1)(i)]
- b) A requirement in the permittee's scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel. [§63.10685(a)(1)(ii)]

- c) Procedures for determining if the requirements and specifications in Condition V.A.1.f.1) above are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications. [§63.10685(a)(1)(iii)]
 - d) The requirements of Condition V.A.1.f.1) above do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials shall be identified in the pollution prevention plan. [§63.10685(a)(1)(iv)]
- 2) *Restricted metallic scrap.* For the production of steel other than leaded steel, the permittee shall not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers, or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, the permittee shall not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers, or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if the permittee meets the requirements in Condition V.A.1.g.3) below. [§63.10685(a)(2)]
- g. *Mercury requirements.* For scrap containing motor vehicle scrap, the permittee shall procure the scrap pursuant to one of the compliance options in Conditions V.A.1.g.1), V.A.1.g.2), or V.A.1.g.3) below for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, the permittee shall procure the scrap pursuant to the requirements in Condition V.A.1.g.4) for each scrap provider, contract, or shipment. The permittee may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision. [§63.10685(b); §2103.12.a.2.B]
- 1) *Site-specific plan for mercury switches.* The permittee shall comply with the requirements in Conditions V.A.1.g.1)a) through V.A.1.g.1)e) below. [§63.10685(b)(1)]
 - a) The permittee shall include a requirement in the permittee's scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap. [§63.10685(b)(1)(i)]
 - b) The permittee shall prepare and operate according to a plan demonstrating how the permittee's facility will implement the scrap specification in Condition V.A.1.g.1)a) above for removal of mercury switches. The permittee shall submit the plan to the permitting authority for approval. The permittee shall operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. The permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon a 90-day written notice based upon the semiannual compliance report or other information. The plan shall include: [§63.10685(b)(1)(ii)]
 - i) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that

- scrap as required under the rules implementing Subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 to 265 and 268). The plan shall include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols; [§63.10685(b)(1)(ii)(A)]
- ii) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification; [§63.10685(b)(1)(ii)(B)]
 - iii) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency, such means of corroboration will be implemented; and [§63.10685(b)(1)(ii)(C)]
 - iv) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in Condition V.A.1.g.1)b)iii) above. [§63.10685(b)(1)(ii)(D)]
- c) The permittee shall require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the permittee's facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time. [§63.10685(b)(1)(iii)]
 - d) The permittee shall establish a goal for each scrap provider to remove at least 80 % of the mercury switches. Although a site-specific plan approved under Condition V.A.1.g.1) above may require only the removal of convenience light switch mechanisms, the permitting authority will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80% goal. [§63.10685(b)(1)(iv)]
 - e) For each scrap provider, the permittee shall submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA Subtitle C regulations referenced in Condition V.A.1.g.1)b)i) above. This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following a 90-day notice based on the progress reports or other information. [§63.10685(b)(1)(v)]
- 2) *Option for approved mercury programs.* The permittee shall certify in the permittee's notification of compliance status that the permittee participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator or the Department based on the criteria in Conditions V.A.1.g.2)a) through V.A.1.g.2)c) below. If the permittee purchases motor vehicle scrap from a broker, the permittee shall certify that all scrap received from that broker was

obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator or the Department based on the criteria in Conditions V.A.1.g.2)a) through V.A.1.g.2)c) below. The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under Condition V.A.1.g.2) unless and until the Administrator or the Department disapproves the program (in part or in whole) under Condition V.A.1.g.2)c) below. [§63.10685(b)(2)]

- a) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches; [§63.10685(b)(2)(i)]
 - b) The program has a goal to remove at least 80% of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under Condition V.A.1.g.2) above may require only the removal of convenience light switch mechanisms, the Administrator or the Department will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80% goal; and [§63.10685(b)(2)(ii)]
 - c) The program sponsor agrees to submit progress reports to the Administrator or the Department no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing Subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports shall be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator or the Department may change the approval status of a program or portion of a program (e.g., at the State level) following a 90-day notice based on the progress reports or on other information. [§63.10685(b)(2)(iii)]
 - d) The permittee shall develop and maintain onsite a plan demonstrating the manner through which the permittee's facility is participating in the EPA-approved program. [§63.10685(b)(2)(iv)]
 - i) The plan shall include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility. [§63.10685(b)(2)(iv)(A)]
 - ii) The permittee shall provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols. [§63.10685(b)(2)(iv)(B)]
 - iii) The permittee shall conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles. [§63.10685(b)(2)(iv)(C)]
- 3) *Option for specialty metal scrap.* The permittee shall certify in the permittee's notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the

nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches. [§63.10685(b)(3)]

- 4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in Condition V.A.1.g.1) through V.A.1.g.3) above, the permittee shall certify in the permittee's notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap. [§63.10685(b)(4)]

2. Testing Requirements:

- a. The permittee shall perform emission tests for exhaust gas PM/PM₁₀ concentrations (gr/dscf), equivalent mass emission rates (lb/hr), and CO and VOC emission rates (lb/hr) at the Melt Shop Baghouse to demonstrate compliance with Condition V.A.1.e above. During the test the damper positions, the differential pressure drop across each compartment and the amperage for each fan motor shall be monitored and recorded on a continuous basis. In addition, the time of each charge, melt and tap shall be recorded and reported during the test. [§2103.12.a.2.B]
- b. The permittee shall perform the emission testing required in Condition V.A.2.a above in accordance with Method Nos. 1 through 5, 9, 10, and 25A or 25B of Appendix A of 40 CFR Part 60, or other methods approved by the Department, and in accordance with Site Level Condition IV.13 above and §2108.02. [§2103.12.a.2.B; §63.10686(d)(1)]
- c. During any performance test required under §60.8, and this permit and for any report thereof required by Condition V.A.5.e below, or to determine compliance Condition V.A.1.a.3) above, the permittee shall monitor the following information for all heats covered by the test: [§60.274a(h)]
 - 1) Charge weights and materials, and tap weights and materials
 - 2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside an EAF when direct-shell evacuation control systems are used;
 - 3) Control device operation log; and
 - 4) Continuous opacity monitor or Method 9 data.
- d. During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions. [§60.275a(a)]
- e. When emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of 40 CFR Part 60 Subpart AAa but controlled by a common capture system and control device, the permittee shall use either or both of the following procedures during a performance test: [§60.276a(e); §60.275a(b)]
 - 1) Determine compliance using the combined emissions.
 - 2) Use a method that is acceptable to the Department and the Administrator and that compensates for the emissions from the facilities not subject to 40 CFR Part 60 Subpart AAa.
- f. When emission from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to 40 CFR Part 60 Subpart AAa, the permittee shall demonstrate compliance with Condition V.A.1.a.3) above based on emissions from only the EAF. [§60.275a(c)]

- g. In conducting the performance tests, the permittee shall use as reference methods and procedures the test methods in 40 CFR Part 60 Appendix A or other methods and procedures as specified in §60.275a, except as provided in §60.8(b). [§60.275a(d)]
- h. The permittee shall determine compliance with the particulate matter and opacity standards in Conditions V.A.1.a and V.A.1.b above as follows: [§60.275a(e)]
 - 1) Method 5 shall be used for negative-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least four hours and 4.50 dscm (160 dscf) and, when a single EAF or AOD vessel is sampled, the sampling time shall include an integral number of heats.
 - 2) Method 9 and the procedures of §60.11 shall be used to determine opacity.
 - 3) To demonstrate compliance with Conditions V.A.1.a.1), V.A.1.a.2), and V.A.1.a.3) above, the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.
- i. To comply with Conditions V.A.3.j. and V.A.2.c.1) through V.A.2.c.4) above, the permittee shall obtain the information required in these conditions during the particulate matter runs. [§60.275a(f)]
- j. Any control device subject to the provisions of 40 CFR Part 60 Subpart AAa shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures. [§60.275a(g)]
- k. Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to 40 CFR Part 60 Subpart AAa but controlled by a common capture system and control device, the permittee may use any of the following procedures during a performance test: [§60.275a(h)]
 - 1) Base compliance on control of the combined emissions;
 - 2) Utilize a method acceptable to the Department and the Administrator that compensates for the emissions from the facilities not subject to Condition V.A.1.a 40 CFR Part 60 Subpart AAa, or
 - 3) Any combination of the criteria of Conditions V.A.2.k.1) and V.A.2.k.2) above.
- l. Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to 40 CFR Part 60 Subpart AAa, determinations of compliance with Condition V.A.1.a.3) above will only be based upon emissions originating from the EAF. [§60.275a(i)]
- m. Unless the presence of inclement weather makes concurrent testing infeasible, the permittee shall conduct concurrently the performance tests required under §60.8 and this permit to demonstrate compliance with Conditions V.A.1.a.1), V.A.1.a.2), and V.A.1.a.3) above. [§60.275a(j)]
- n. The testing required by Condition V.A.2.a above shall be repeated at least once every five years from the date of the prior valid test. [§2103.12.h.1; 25 PA Code §129.115; 2105.08]
- o. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h.1]

3. Monitoring Requirements:

- a. Except as provided under Conditions V.A.3.c and V.A.3.d below, a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) shall be installed, calibrated, maintained, and operated by the permittee. [§60.273a(a)]
- b. All continuous monitoring systems required by Condition V.A.3.a above shall be approved by the Department prior to being installed in accordance with the requirements of §2108.03. [§2108.03]
- c. No continuous monitoring system shall be required on any control device serving the dust-handling system. [§60.273a(b)]
- d. A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) is not required on any modular, multi-stack, negative-pressure, or positive-pressure fabric filter if observations of the opacity of the visible emissions from the control device are performed by a certified visible emission observer; or on any single-stack fabric filter if visible emissions from the control device are performed by a certified visible emission observer and the permittee installs and continuously operates a bag leak detection system according to paragraph (e) of this section. Visible emission observations shall be conducted at least once per day for at least three (3), six-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three (3) six-minute observations will be required. In that case, the Method 9 observations shall be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any six-minute average that is in excess of the emission limit specified in Condition V.A.1.a above. [§60.273a(c)]
- e. A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of shop opacity are performed by a certified visible emission observer as follows: shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations shall be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. [§60.273a (d)]
- f. A bag leak detection system shall be installed and continuously operated on all single-stack fabric filters if the permittee elects not to install and operate a continuous opacity monitoring system as provided for under Condition V.A.3.c above. In addition, the permittee shall meet the visible emissions observation requirements in Condition V.A.3.c above. The bag leak detection system shall meet the specifications and requirements of Conditions V.A.3.f.1) through V.A.3.f.8) below: [§60.273a(e)]

- 1) The bag leak detection system shall be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of one milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less. [§60.273a(e)(1)]
 - 2) The bag leak detection system sensor shall provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger). [§60.273a (e)(2)]
 - 3) The bag leak detection system shall be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Condition V.A.3.f.4) below, and the alarm shall be located such that it can be heard by the appropriate plant personnel. [§60.273a(e)(3)]
 - 4) For each bag leak detection system required by Condition V.A.3.f above, the permittee shall develop and submit to the Administrator, the Department, or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in Conditions V.A.3.f.4)a) through V.A.3.f.4)e) below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document “Fabric Filter Bag Leak Detection Guidance” (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following: [§60.273a(e)(4)]
 - a) Installation of the bag leak detection system;
 - b) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
 - c) Operation of the bag leak detection system, including quality assurance procedures;
 - d) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
 - e) How the bag leak detection system output shall be recorded and stored.
 - 5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable). [§60.273a(e)(5)]
 - 6) Following initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator, the Department, or delegated authority except as provided for in Conditions V.A.3.f.6)a) and V.A.3.f.6)b) below. [§60.273a(e)(6)]
 - a) Once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Condition V.A.3.f.4) above.
 - b) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under Condition V.A.3.c above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.
 - 7) For negative-pressure-induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor shall be installed downstream of the baghouse and upstream of any wet scrubber. [§60.273a(e)(7)]
 - 8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. [§60.273a(e)(8)]
- g. For each bag leak detection system installed according to Condition V.A.3.f above, the permittee shall initiate procedures to determine the cause of all alarms within one hour of an alarm. Except

as provided for under Condition V.A.3.h below, the cause of the alarm shall be alleviated within three (3) hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following: [§60.273a(f)]

- 1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions; [§60.273a(f)(1)]
 - 2) Sealing off defective bags or filter media; [§60.273a(f)(2)]
 - 3) Replacing defective bags or filter media or otherwise repairing the control device; [§60.273a(f)(3)]
 - 4) Sealing off a defective baghouse compartment; [§60.273a(f)(4)]
 - 5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and [§60.273a(f)(5)]
 - 6) Shutting down the process producing the particulate emissions. [§60.273a(f)(6)]
- h. In approving the site-specific monitoring plan required in Condition V.A.3.f.4) above, the Administrator, Department, or delegated authority may allow the permittee more than three (3) hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within three (3) hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable. [§60.273a(g)]
- i. Except as provided under Condition V.A.3.l below, the permittee shall either: check and record the control system fan motor amperes on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of $\pm 10\%$ over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Department may require the permittee to demonstrate the accuracy of the monitoring device(s) relative to 40 CFR Part 60 Appendix A Methods 1 and 2. [§60.274a(b)]
- j. When the permittee is required to demonstrate compliance with Condition V.A.1.a.3) above, and at any other time that the Department or the Administrator may require (under Section 114 of the Act, as amended), either: the control system fan motor amperes, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAF. The permittee may petition the Department and/or the Administrator for reestablishment of these parameters whenever the permittee can demonstrate to the Department's and the Administrator's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of §60.276a(c). [§60.274a(c)]
- k. Except as provided under Condition V.A.3.l below, the permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions

caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed. [§60.274a(d)]

- l. The permittee may petition the Department and the Administrator to approve any alternative to either the monitoring requirements specified in Condition V.A.3.i above or the monthly operational status inspections specified in Condition V.A.3.k above if the alternative will provide a continuous record of operation of each emission capture system. [§60.274a(e)]
- m. Except as provided for under Condition V.A.3.e above, if emissions during any phase of the heat time are controlled by the use of a DEC system, the permittee shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ± 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions. [§60.274a(f)]
- n. Except as provided for under Condition V.A.3.e above, when the permittee of an EAF controlled by a DEC is required to demonstrate compliance with the standard under §60.272a(a)(3), and at any other time the Department may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under Condition V.A.3.g above. The permittee may petition the Administrator or the Department for reestablishment of the pressure whenever the permittee can demonstrate to the Administrator's or the Department's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Administrator or the Department to be unacceptable operation and maintenance of the affected facility. [§60.274a(g)]
- o. The permittee shall conduct an inspection on the Melt Shop Baghouse once per week to demonstrate compliance with Conditions V.A.1.c.1) and V.A.1.c.2) above. [§2103.12.h.1]
- p. The permittee shall check and record the fan motor amperes for the emission control system (i.e., Melt Shop Baghouse) on a once-per-shift basis. [§2103.12.h.1]
- q. The permittee shall, at all times, have instrumentation to continuously monitor the differential pressure drop across each compartment of the Melt Shop Baghouse during operation of the EAF. Such instrumentation shall measure the pressure drop to within $\frac{1}{2}$ " w.c. and be properly operated, calibrated, and maintained according to manufacturer's specifications. [§2103.12.h.1]

4. Record Keeping Requirements:

- a. The permittee shall maintain records of the following information: [§60.274a(a)]
 - 1) All data obtained under Condition V.A.3.i above, and
 - 2) All monthly operational status inspections performed under Condition V.A.3.k above.
- b. The permittee shall maintain records to demonstrate compliance with the requirements of §2105.06 and RACT Order No. 241. Such records shall provide sufficient data and calculations

to clearly demonstrate that all requirements of §2105.06 and RACT Order No. 241 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include, but not be limited to the following: [RACT Order #241, §1.2; §2103.12.j.1; 25 PA Code §129.115; §2105.08]

- 1) Number of heats and production for the EAF (daily, monthly, 12-month);
 - 2) Time and duration of each furnace charge and tap (per charge/tap, monthly average, 12-month);
 - 3) Differential pressure drop across each compartment of the Melt Shop Baghouse; and
 - 4) Stack test protocols and reports.
- c. The permittee shall maintain a copy of the manufacturer's specifications for the Melt Shop Baghouse, records of control system inspections and performance evaluations and all records of calibration checks, adjustments, and maintenance performed on all equipment that is subject to this permit. [§2103.12.j.1]
- d. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.h.1]
- e. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; §60.276a(a); 25 PA Code §129.115; §2105.08]
- f. *Recordkeeping and reporting requirements.* In addition to the records required by §63.10, the permittee shall keep records to demonstrate compliance with the requirements for the permittee's pollution prevention plan in Condition V.A.1.f.1) above and/or for the use of only restricted scrap in Condition V.A.1.f.2) above and for mercury in Conditions V.A.1.g.1) through V.A.1.g.3) above, as applicable. The permittee shall keep records documenting compliance with Condition V.A.1.g.4) above for scrap that does not contain motor vehicle scrap. [§63.10685(c)]
- 1) If the permittee is subject to the requirements for a site-specific plan for mercury under Condition V.A.1.g.1) above, the permittee shall: [§63.10685(c)(1)]
 - a) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and [§63.10685(c)(1)(i)]
 - b) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports shall include a certification that the permittee has conducted inspections or taken other means of corroboration as required under Condition V.A.1.g.1)b)iii) above. The permittee may include this information in the semiannual compliance reports required under Condition V.A.4.f.3) below. [§63.10685(c)(1)(ii)]
 - 2) If the permittee is subject to the option for approved mercury programs under Condition V.A.1.g.2) above, the permittee shall maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If the permittee purchases motor vehicle scrap from a broker, the permittee shall maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program. [§63.10685(c)(2)]

- 3) The permittee shall submit semiannual compliance reports to the Administrator or the Department for the control of contaminants from scrap according to the requirements in §63.10(e). The report shall clearly identify any deviation from the requirements in Conditions V.A.1.f and V.A.1.g above and the corrective action taken. The permittee shall identify which compliance option in Condition V.A.1.g above applies to each scrap provider, contract, or shipment. [§63.10685(c)(3)]

5. Reporting Requirements:

- a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: [§2103.12.k.1]
 - 1) Monthly and 12-month data required to be reported by Condition V.A.4.a above; and
 - 2) Noncompliance information required to be recorded by Condition V.A.4.d above.
- b. The permittee shall submit a written report of exceedances of the control device opacity to the Department and the Administrator semiannually. For the purposes of these reports, exceedances are defined as all six-minute periods during which the average opacity is 3% or greater. [§60.276a(b)]
- c. Either operation of control system fan motor amperes at values outside the range of 80 amps to 115 amps or operation at flow rates lower than those established under Condition V.A.3.j above may be considered by the Department or the Administrator to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Department and the Administrator semiannually. [§60.276a(c)]
- d. When the permittee is required to demonstrate compliance with the standard under Condition V.A.2.e.2) above or a combination of Conditions V.A.2.e.1) and V.A.2.e.2) above, the permittee shall obtain approval from the Department and the Administrator of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used shall be postmarked at least 30 days prior to the performance test. Notification procedures of §2108.02 shall also apply. [§60.276a(e); §2108.02]
- e. The permittee shall conduct the demonstration of compliance with Conditions V.A.1.a above and furnish the Department and the Administrator a written report of the results of the test. This report shall include the following information: [§60.276a(f)]
 - 1) Facility name and address;
 - 2) Plant representative;
 - 3) Make and model of process, control device, and continuous monitoring equipment;
 - 4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
 - 5) Rated (design) capacity of process equipment;
 - 6) Those data required under Condition V.A.2.c above;
 - a) List of charge and tap weights and materials;
 - b) Heat times and process log;
 - c) Control device operation log; and
 - d) Continuous opacity monitor or Method 9 data.
 - 7) Test dates and test times;

- 8) Test company;
 - 9) Test company representative;
 - 10) Test observers from outside agency;
 - 11) Description of test methodology used, and any deviation from standard reference methods;
 - 12) Schematic of sampling location;
 - 13) Number of sampling points;
 - 14) Description of sampling equipment;
 - 15) Listing of sampling equipment calibrations and procedures;
 - 16) Field and laboratory data sheets;
 - 17) Description of sample recovery procedures;
 - 18) Sampling equipment leak check results;
 - 19) Description of quality assurance procedures;
 - 20) Description of analytical procedures;
 - 21) Notation of sample blank corrections; and
 - 22) Sample emission calculations.
- f. All shop opacity observations in excess of the emission limits specified in Conditions V.A.1.a.2) and V.A.1.a.3) above shall indicate a period of excess emission, and shall be reported to the Department semiannually, according to §60.7(c). [§60.276a(g); §2103.12.k.1]
- g. Reporting instances of noncompliance in accordance with Condition V.A.5.a.2) above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standard:

- a. The permittee shall not, at any time, operate the Electric Arc Furnace and Melt Shop Baghouse unless they are properly operated and maintained according to good engineering and air pollution control practices. Such practices shall include, but are not limited to, minimizing the input of outside air and minimizing the opening of the slag door. [25 PA Code §129.112(c)(11); §2105.08]
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

B. Process P002: Argon-Oxygen Decarburization Vessel

Process Description:	Argon-Oxygen Decarburization (AOD) Vessel
Facility ID:	P002
Max. Design Rate:	35.5 TPH
Capacity:	25.1 TPH; 175,200 TPY (Based on EAF Steel Production)
Raw Materials:	Molten Steel, Scrap Steel, Alloy Elements, Flux
Control Device:	Melt Shop Baghouse
Stack I.D.:	S001

1. Restrictions:

- a. At no time shall the permittee allow the AOD Vessel to operate unless it is being maintained and operated in accordance with good engineering practice and within the manufacturer's specifications. [25 PA Code §129.112(c)(11); §2105.08]
- b. The permittee shall at no time conduct AOD process operations unless the Melt Shop pollution control equipment is properly maintained and operated according to the following conditions: [§2103.12.a.2.B; OP #7037009-000-16401]
 - 1) The fugitive emissions capture equipment shall consist of a canopy hood system ducted to the Melt Shop Baghouse and closed roof scavenger points ducted to the Melt Shop Baghouse.
 - 2) The AOD shall be equipped with a canopy hood for collection of process emissions, and such hood shall be properly maintained and operated at all times with all captured emissions ducted to the Melt Shop Baghouse.
- c. The production of steel at the AOD shall be limited by EAF steel production to not exceed 175,200 tons of steel in any consecutive 12-month period. [§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.12 and Article XXI §2108.02. [§2103.12.h.1]

3. Monitoring Requirements:

None except as provided in V.A.3 above.

4. Record Keeping Requirements:

- a. The permittee shall keep records to demonstrate compliance with Article XXI, §2105.08 and 25 PA Code §§ 129.111-129.115. The records shall include sufficient data and calculations to demonstrate that the requirements of §§ 129.111-129.115 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee in a time frame consistent with the averaging period of the requirement and shall include: [25 PA Code §129.115(f); §2105.08]
 - 1) Number of heats and production for the AOD (daily, monthly, 12-month);
 - 2) Time and duration of each vessel charge and tap (per charge/tap, monthly average, 12-month);

- 3) Differential pressure drop across each compartment of the EAF Melt Shop Baghouse; and
 - 4) Stack test protocols and reports.
- b. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]
 - c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.115(k); §2105.08]

5. Reporting Requirements:

- a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report: [§2103.12.k.1]
 - 1) Monthly and 12-month data required to be reported by Condition V.B.4.a above; and
 - 2) Noncompliance information required to be recorded by Condition V.B.4.b above.
- b. Reporting instances of noncompliance in accordance with Condition V.B.5.a.2) above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

6. Work Practice Standard:

- a. The permittee shall not, at any time, operate the AOD Vessel and Melt Shop Baghouse unless they are properly operated and maintained according to good engineering and air pollution control practices. [25 PA Code §129.115; §2105.08]
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

C. Process P003: Teeming Ladle Heaters

Process Description:	Teeming Ladle Heaters
Facility ID:	P003
Capacity:	Two 8.9 MMBtu/hr burners totaling 17.8 MMBtu/hr
Fuel:	Natural Gas
Control Device:	North American 4575-9 HiRAM Burners

1. Restrictions:

- a. Only commercial-quality natural gas shall be combusted in the Teeming Ladle Heaters. [IP #0027-I008, V.A.1.a; §2103.12.a.2.D]
- b. Natural gas usage in the Teeming Ladle Heaters shall not exceed a total of 152.9 million cubic feet in any 12 consecutive months. [IP #0027-I008, V.A.1.b; §2103.12.a.2.D; 25 PA Code §129.115]
- c. The permittee shall not operate or allow to be operated, the Teeming Ladle Heaters unless the low-NO_x burners are properly installed, maintained, and operated consistent with good air pollution control practice. [IP #0027-I008, V.A.1.c; §2103.12.a.2.D; §2105.03; 25 PA Code §129.112(c)(4)]
- d. Emissions of nitrogen oxides (NO_x) shall not exceed 0.068 lbs/MMBtu of heat input. [IP #0027-I008, V.A.1.d; §2103.12.a.2.D]

2. Testing Requirements:

The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.12 and Article XXI §2108.02. [§2103.12.h.1]

3. Monitoring Requirements:

The permittee shall monitor the monthly quantity of natural gas usage of the teeming ladle heaters. Natural gas usage may be proportioned using the existing metering system. [IP #0027-I008, V.A.3]

4. Record Keeping Requirements:

- a. The permittee shall maintain records of the amount of natural gas usage (monthly and 12-month) for the Teeming Ladle Heaters. [IP #0027-I008, V.A.4.a; §2103.12.a.2.D; 25 PA Code §129.115]
- b. The permittee shall maintain records of operation, maintenance, inspection, calibration, and/or replacement of combustion equipment. [IP #0027-I008, V.A.4.b; §2103.12.j; 25 PA Code §129.115]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [IP #0027-I008, V.A.4.c; §2103.12.j.2; 25 PA Code §129.115]

- d. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [IP #0027-I008, V.A.4.d; §2103.12.j]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition V.C.4.d above to the Department in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report. [IP #0027-I008, V.A.5.a; §2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.C.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [IP #0027-I008, V.A.5.b; §2103.12.k.1]

6. Work Practice Standard:

The permittee shall not, at any time, operate the Teeming Ladle Heaters unless they are properly operated and maintained according to good engineering and air pollution control practices. [§2105.06; §2105.03; 25 PA Code §129.112(c)(4)]

D. Process P005: Teeming

Process Description: Teeming
Facility ID: P005
Capacity: 60 TPH
Fuel/Raw Material: Molten Steel
Control Device(s): Melt Shop Baghouse
Stack I.D.: S001

1. Restrictions:

The throughput of molten steel at the teeming process shall not exceed 175,200 tons of steel in any consecutive 12-month period. [§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition III.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

None except as specified in Condition V.A.3 above for the Melt Shop Baghouse.

4. Record Keeping Requirements:

- a. Records shall be kept by the facility to demonstrate compliance with the requirements of §2105.06 and RACT Order No. 241. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06 and RACT Order No. 241 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include the total amount of molten metal teemed on a daily, monthly, and 12-month basis. [RACT Order No. 241, Condition 1.2]
- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]
- c. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition V.D.4.c above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.D.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

- a. The permittee shall not, at any time, operate the teeming process and Melt Shop Baghouse unless the equipment is properly operated and maintained according to good engineering and air pollution control practices. [RACT Order No. 241, Condition 1.1; §2105.06; §2105.03]
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

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E. Process P006: Electro-Slag Remelt Holding Furnaces

Process Description: Electro-Slag Remelt Holding Furnaces
Facility ID: P006
Capacity: 7.0 MMBtu/hr Total
Fuel/Raw Material: Natural Gas
Control Device(s): None

1. Restrictions:

- a. Only commercial-quality natural gas shall be combusted in the Electro-Slag Remelt Holding Furnaces. [§2103.12.h.1]
- b. Natural gas usage in the Electro-Slag Remelt Holding Furnaces shall not exceed a total of 60.1 million cubic feet in any 12 consecutive months. [§2103.12.a.2.B; 25 PA Code §129.115]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.12 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

None except as specified elsewhere.

4. Record Keeping Requirements:

- a. Records shall be kept by the facility to demonstrate compliance with the requirements of § 2105.08. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of § 2105.08 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include, but not be limited to, production and operating records. [25 PA Code §129.115]
- b. The permittee shall maintain records of the hours of operation and amount of natural gas usage (monthly and 12-month) for the Electro-Slag Remelt Holding Furnaces. [25 PA Code §129.115]
- c. The permittee shall maintain records of operation, maintenance, inspection, calibration, and/or replacement of combustion equipment. [§2103.12.j]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.115]
- e. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition V.E.4.e above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.E.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

- a. The permittee shall not, at any time, operate the Electro-Slag Remelt Holding Furnaces unless they are properly operated and maintained according to good engineering and air pollution control practices. [§2105.08; §2105.03; §; 25 PA Code §129.112(c)(4)]
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

F. Process P007: Electro-Slag Remelt Furnaces

Process Description:	Electro-Slag Remelt Furnaces (4 ESR Remelt Furnaces: A-left, A-right, B & C)
Facility ID:	P007
Capacity:	7 TPH, Total of Four Furnaces
Total Annual Production:	61,320 TPY
Fuel/Raw Material:	N/A (electric)/Alloy Steel Ingots, Slag
Control Device(s):	ESR Baghouse
Stack I.D.:	S002

1. Restrictions:

- a. The permittee shall at no time conduct Electro-Slag Remelt operations unless the Remelt Furnaces pollution control equipment are properly maintained and operated according to the following conditions: [§2103.12.a.2.B]
 - 1) All exhaust from the Electro-Slag Remelt Furnaces shall be vented to the Remelt Furnaces Baghouse. The baghouse shall be equipped with automatic cleaning controls and instrumentation that shall continuously measure the differential pressure drop across the baghouse to within 2% of the measuring span of the device while treating particulate emissions from the Remelt Shop.
 - 2) The Remelt Furnaces Baghouse shall have a minimum exhaust flow rate of 18,000 dscfm.
 - 3) The differential pressure drops across each Remelt Furnace Baghouse compartment shall be between 2" w.c. and 8" w.c., inclusive.
- b. The production of steel at the Electro-Slag Remelt Furnace shall not exceed 61,320 tons of steel in any consecutive 12-month period. [§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

- a. The permittee shall inspect the Remelt Furnaces Baghouse, weekly, during operation to assure compliance with the operating specifications of Condition V.F.1.a above. Any excursions from the subject specifications shall be corrected as soon as possible. [§2103.12.h.1]
- b. The permittee shall check and record the fan motor amperes for the Electro-Slag Remelt Furnaces emission control system on a once-per-shift basis. [§2103.12.h.1]
- c. The differential pressure drop across each compartment in the Remelt Furnaces Baghouse shall be recorded once per day and the differential pressure drop across each compartment of the Remelt Furnace Baghouse shall be between 2" and 8" w.c., inclusive. [§2103.12.a.2.B]

4. Record Keeping Requirements:

- a. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include, but not be limited to, the following: [§2103.12.j]
 - 1) Number of heats and production for each furnace (daily, monthly, 12-month);
 - 2) Time and duration of each furnace charge and tap (per charge/tap, monthly average, 12-month); and
 - 3) Differential pressure drops across each compartment of the Remelt Furnaces Baghouse.
- b. The results of the inspections required by Condition V.F.3.a above and the differential pressure drop across the Remelt Furnaces Baghouse shall be recorded at the time of each inspection. Episodes of noncompliance with Condition V.F.1.b above and corrective actions taken shall be recorded upon occurrence. [§2103.12.j.1]
- c. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j.1]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition V.F.4.c above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.F.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

G. Process P010: Hot Rolling/Blooming Mill

Process Description: Hot Rolling/Blooming Mill
Facility ID: P010
Maximum Design Rate: 34.31 tons/hr
Capacity: 104,000 TPY
Fuel/Raw Material: Alloy, Steel Ingots
Control Device(s): None
Stack I.D.: N/A

1. Restrictions:

- a. Particulate Matter (PM) emissions from the Hot Rolling/Blooming Mill shall not exceed seven (7) pounds in any 60-minute period, or 100 pounds in any 24-hour period, or 18.25 tons/year. [§2104.02.b; §2103.12.a.2.B]
- b. The permittee shall not operate, or allow to be operated, the Hot Rolling/Blooming Mill in such a manner that the production during any 12 consecutive months exceeds 104,000 tons of steel. [§2103.12.a.2.B]
- c. VOC emissions from the Hot Rolling/Blooming Mill shall not exceed 0.30 lb/hr or 1.30 tons/year. [§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

None except as specified elsewhere.

4. Record Keeping Requirements:

- a. The permittee shall always maintain records of the amounts and types of lubrication oils used (monthly and 12-month) and the VOC contents of these oils. [§2103.12.j.2]
- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]
- c. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]

5. Reporting Requirements

- a. The permittee shall report noncompliance information required to be recorded by Condition V.G.4.c above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]

- b. Reporting instances of noncompliance in accordance with Condition V.G.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

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H. Process P011 & P018: Annealing Furnaces and Plate-Warming Furnace

Process Description:	Annealing Furnaces (P011) and Plate-Warming Furnace (P018)
Facility ID:	P011 & P018
Capacity:	Annealing Furnaces (184.34 MMBtu/hr total rated capacity) and the Plate-Warming Furnace (6.96 MMBtu/hr)
Fuel/Raw Material:	Natural Gas/Alloy, Steel Billets, and Slabs
Control Device(s):	See table below
Stack I.D.:	N/A

The Annealing Furnaces and Plate-Warming Furnace are listed in the following table:

FURNACE I.D.	RATING (MMBtu/hr)	CONTROL DEVICE	LOCATION
Car-Bottom Furnace No. 11	11.04	None	80 Foot Bldg.
Clamshell Furnace No. CLM1	6.0	None	400 Foot Bldg.
Hood Furnace No. 01	8.8	None	80 Foot Bldg.
Hood Furnace No. 02	8.8	None	80 Foot Bldg.
Hood Furnace No. 03	8.8	None	80 Foot Bldg.
Hood Furnace No. 04	8.8	None	80 Foot Bldg.
Hood Furnace No. 05	8.8	None	80 Foot Bldg.
Hood Furnace No. 06	8.8	None	80 Foot Bldg.
Hood Furnace No. 07	8.8	None	400 Foot Bldg.
Hood Furnace No. 08	8.8	None	400 Foot Bldg.
Hood Furnace No. 09	8.8	None	80 Foot Bldg.
Hood Furnace No. 10	8.8	None	80 Foot Bldg.
Ingot-Hood Furnace No. CP-1	4.4	None	Creek Bldg.
Ingot-Hood Furnace No. CP-2	4.4	None	CP-Dock Bldg.
Ingot-Hood Furnace No. CP-3	4.4	None	Creek Bldg.
Ingot-Hood Furnace No. CP-4	4.4	None	CP-Dock Bldg.
Plate-Warming Furnace	6.96	None	Creek Bldg.
Hood Furnace No. 11	8.8	Low NO _x Burners	80 Foot Bldg.
Hood Furnace No. 12	8.8	Low NO _x Burners	80 Foot Bldg.
Hood Furnace No. 13	8.8	Low NO _x Burners	80 Foot Bldg.
Hood Furnace No. 14	8.8	Low NO _x Burners	400 Foot Bldg.
Clamshell Furnace No. CLM2	8.8	Low NO _x Burners	400 Foot Bldg.
Ingot-Hood Furnace No. CP-5	4.4	Low NO _x Burners	CP-Dock Bldg.
Ingot-Hood Furnace No. CP-6	4.4	Low NO _x Burners	CP-Dock Bldg.
Ingot-Hood Furnace No. CP-7	4.4	Low NO _x Burners	CP-Dock Bldg.
Bar-Hood Furnace No. 1	4.5	Low NO _x Burners	400 Foot Bldg.
TOTAL	191.3		

1. Restrictions:

- a. The permittee shall not operate or allow to be operated Car-Bottom Furnace No. 11, Clamshell Furnace CLM2, Hood Furnace Nos. 11 through 14, Ingot-Hood Furnaces CP-1 through CP-5, CP-6, and CP-7, and Bar-Hood Furnace No. 1 unless the low-NO_x burners are properly installed, maintained, and operated consistent with good air pollution control practice. [§2105.03; IP #0027-I007, V.A.1.c; 129.112(c)(4)]
- b. Emissions of nitrogen oxides (NO_x) from Car-Bottom Furnace No. 11, Clamshell Furnace CLM1, Hood Furnace Nos. 1 through 10, Ingot-Hood Furnaces CP-1 through CP-4, and the Plate-Warming Furnace shall not exceed 0.065 lbs/MMBtu of heat input. [§2103.12.a.2.B]
- c. Emissions of carbon monoxide (CO) from Car-Bottom Furnace No. 11, Clamshell Furnace CLM1, Hood Furnace Nos. 1 through 10, Ingot-Hood Furnaces CP-1 through CP-4, and the Plate-Warming Furnace shall not exceed 0.037 lbs/MMBtu of heat input. [§2103.12.a.2.B]
- d. Only commercial-quality natural gas shall be combusted in the Annealing Furnaces and Plate-Warming Furnace. [§2103.12.h.1; IP #0027-I007, V.A.1.a; IP #0027-I006, V.A.1.a; §2103.12.a.2.D]
- e. Natural gas usage in the Annealing Furnaces and Plate-Warming Furnace shall not exceed a total of 1,596 million cubic feet in any 12 consecutive months. [§2103.12.a.2.B; 25 PA Code §129.115]
- f. Ingot-Hood Annealing Furnace CP-5, Hood Annealing Furnace Nos. 11, 12, and 13, and Bar-Product Annealing Furnace BAR-1 each shall be equipped with low-NO_x burners that will limit the concentration of nitrogen oxides in the exhaust gases of each furnace to no more than 53 parts per million (ppm), dry basis, at 3% oxygen. [§2103.12.a.2.D; IP #0027-I006, V.A.1.c]
- g. Emissions of nitrogen oxides from Ingot-Hood Annealing Furnace CP-5, Hood Annealing Furnace Nos. 11, 12, and 13, and Bar-Product Annealing Furnace BAR-1 each shall not exceed 0.064 lbs/MMBtu of heat input. [§2103.12.a.2.D; IP #0027-I006, V.A.1.d]
- h. Emissions of nitrogen oxides (NO_x) from Clamshell Furnace CLM2 and Hood Furnace No. 14 shall not exceed 0.068 lbs/MMBTU of heat input. [§2103.12.a.2.D; IP #0027-I007, V.A.1.d]
- i. Emissions of nitrogen oxides (NO_x) from Ingot-Hood Furnaces CP-6 and CP-7 shall not exceed 0.0456 lbs/MMBtu of heat input. [§2103.12.a.2.B]
- j. Emissions of carbon monoxide (CO) from Ingot-Hood Annealing Furnace CP-5, Hood Annealing Furnace Nos. 11, 12, and 13, and Bar Product Annealing Furnace BAR-1 each shall not exceed 0.043 lbs/MMBtu of heat input. [§2103.12.a.2.D; IP #0027-I006, V.A.1.e]
- k. Emissions of carbon monoxide (CO) Ingot-Hood Annealing Furnaces CP-6 and CP-7 shall not exceed 84 lbs/MMCF of fuel input. [§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level

Condition IV.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

None except as specified elsewhere.

4. Record Keeping Requirements:

- a. Records shall be kept by the facility to demonstrate compliance with the requirements of §2105.06 and §2105.08. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06 and §2105.08 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include, but not be limited to, production and operating records. [§2105.06; §2105.08; 25 PA Code §129.115]
- b. The permittee shall record the usage of natural gas by the Annealing Furnaces and Plate-Warming Furnace. The permittee shall maintain records of the hours of operation and amount of natural gas usage (monthly and 12-month) for the Annealing Furnace and Plate-Warming Furnace. [25 PA Code §129.115]
- c. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.115]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition V.H.4.c above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.H.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

- a. The permittee shall not, at any time, operate the Annealing Furnaces and Plate-Warming Furnace unless they are properly operated and maintained according to good engineering and air pollution control practices. [25 PA Code 25 PA Code §129.112(c)(4)]
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

I. Process P012: Reheat Furnaces

Process Description:	Reheat Furnaces
Facility ID:	P012
Capacity:	19 units (187.4 MMBtu/hr total rated capacity)
Production Rate:	103,956 TPY
Fuel/Raw Material:	Natural Gas/Alloy Steel Ingots
Control Device(s):	N/A
Stack I.D.:	N/A

The Reheat Furnaces consist of the following units:

Reheat Furnace ID	Rating (MMBtu/hr)	Control Device	Location
12" Bar-Mill Reheat Furnace No. 01	5.3	Low NO _x Burners	Bar Mill
12" Bar-Mill Reheat Furnace No. 02	5.3	Low NO _x Burners	Bar Mill
12" Bar-Mill Reheat Furnace No. 03	5.3	Low NO _x Burners	Bar Mill
12" Bar-Mill Reheat Furnace No. 04	5.3	Low NO _x Burners	Bar Mill
Bloomer Reheat Furnace No. 7	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 8	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 9	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 10	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 11	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 12	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 13	16.6	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 14	16.6	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 15	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 16	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 17	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 18	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 19	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 20	9.7	Low NO _x Burners	Bloomer Mill
Bloomer Reheat Furnace No. 21	16.6	Low NO _x Burners	Bloomer Mill
TOTAL	187.4		

1. Restrictions:

- a. The permittee shall not operate or allow to be operated the Bar Mill and Bloomer Reheat Furnaces, unless the low-NO_x burners are properly installed, maintained, and operated consistent with good air pollution control practice. [§2105.03]
- b. At no time shall the permittee allow the Bar-Mill and Bloomer Reheat Furnaces to operate unless they are being maintained and operated in accordance with good engineering practice and within the manufacturer's specifications. [25 PA Code §129.112(c)(4)]
- c. Emissions of nitrogen oxides (NO_x) from the Bar-Mill and Bloomer Reheat Furnace Nos. 7 through 12, and Nos. 14 through 20 shall not exceed 0.075 lbs/MMBtu of heat input. [§2103.12.a.2.B]

- d. Emissions of carbon monoxide (CO) from the Bar-Mill and Bloomer Reheat Furnaces shall not exceed 0.037 lbs/MMBtu of heat input. [§2103.12.a.2.D; IP #0027-I005, V.A.1.e]
- e. Only commercial-quality natural gas shall be combusted by the permittee in the Reheat Furnaces. [§2103.12.h.1; §2103.12.a.2.D; IP #0027-I005, V.A.1.a]
- f. Combined natural gas usage in the Bar-Mill and Bloomer Reheat Furnaces shall not exceed a total of 1,608 million cubic feet in any 12 consecutive months. [§2103.12.a.2.D; IP #0027-I005, V.A.1.b; 25 PA Code §129.115]
- g. Bloomer Reheat Furnace Nos. 13 and 21 shall be equipped with low-NO_x burners that will limit the concentration of nitrogen oxides in the exhaust gases of each furnace to no more than 60 parts per million, dry basis, at 3% oxygen. [IP #0027-I005, V.A.1.c; §2103.12.a.2.D]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

The permittee shall monitor the monthly quantity of natural gas usage in each of the reheat furnaces. Natural gas usage may be monitored with the existing metering system. [§2103.12.i]

4. Record Keeping Requirements:

- a. Records shall be kept by the facility to demonstrate compliance with the requirements of §2105.06, 2105.08. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06, 2105.08, and 25 PA. code 129.115 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include, but not be limited to, production and operating records. [25 PA Code §129.115]
- b. The permittee shall record the usage of natural gas by the Reheat Furnaces. The permittee shall maintain records of the hours of operation and amount of natural gas usage (monthly and 12-month) for the Reheat Furnaces. [25 PA Code §129.115]
- c. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]
- d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.115]
- e. The permittee shall keep records for each reheat furnace of all maintenance, inspections, repairs, replacements or other corrective actions. All such records shall be kept on a monthly basis. [IP #0027-I005, V.A.4.a; §2103.12.a.2.D]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition V.I.4.c above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.I.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above if appropriate. [§2103.12.k.1]

6. Work Practice Standards

- a. The permittee shall not, at any time, operate the reheat furnaces unless they are properly operated and maintained according to good engineering and air pollution control practices. [§2105.03; §2105.08; 25 PA Code §129.112(c)(4)]
- b. The permittee shall not operate or allow to be operated each reheat furnace unless the low-NO_x burners specified in Condition V.I.1.c above are properly installed, maintained, and operated consistent with good air pollution control practice. [IP #0027-I005, V.A.6; §2105.03]
- c. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

J. Process B001: Miscellaneous Space Heating Units

Process Description: Miscellaneous Space Heating Units
Facility ID: B001
Capacity: 112 units (13.53 MMBtu/hr total rated capacity)
Fuel/Raw Material: Natural Gas
Control Device(s): None
Stack I.D.: N/A

1. Restrictions:

- a. Only commercial-quality natural gas shall be combusted in the Miscellaneous Space Heating Units. [§2103.12.h.1]
- b. Natural gas usage in the Miscellaneous Space Heating Units shall not exceed a total of 116.2 million cubic feet in any 12 consecutive months. [§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to ensure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements:

None except as specified elsewhere.

4. Record Keeping Requirements:

- a. Records shall be kept by the facility to demonstrate compliance with the requirements of §2105.06 and RACT Order No. 241. Such records shall provide sufficient data and calculations to clearly demonstrate that all requirements of §2105.06 and RACT Order No. 241 are met. Data and information required to determine compliance shall be recorded and maintained by the permittee and shall include the total estimated natural gas usage. [RACT Order #241, §1.2; 25 PA Code §129.100; 25 PA Code §129.115]
- b. The permittee shall at all times maintain records of the estimated amount of natural gas usage for the Miscellaneous Space Heating Units. [RACT Order #241, §1.3; 25 PA Code §129.100; 25 PA Code §129.115]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100; 25 PA Code §129.115]
- d. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition

- V.J.4.d above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.J.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

- a. The permittee shall not, at any time, operate the Miscellaneous Space Heating Units unless they are properly operated and maintained according to good engineering and air pollution control practices. [RACT Order #241, §1.1; §2105.06; §2105.03; 25 PA Code §129.97(c); 25 PA Code §129.112(c)(4)]
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. [§2105.03]

K. Process P023: AOD Relining Heater

Process Description: AOD Relining Heater
Facility ID: P023
Capacity: 8.9 MMBtu/hr burner
Fuel: Natural Gas
Control Device(s): North American 4575-9 HiRAM Burners

1. Restrictions

- a. Only commercial-quality natural gas shall be combusted in the AOD Relining Heater. [IP #0027-I009, V.A.1.a; §2103.12.a.2.D]
- b. Natural gas usage in the AOD Relining Heater shall not exceed a total of 76.44 million cubic feet in any 12 consecutive months. [IP #0027-I009, V.A.1.b; §2103.12.a.2.D; 25 PA Code §129.115]
- c. The permittee shall not operate or allow to be operated, the AOD Relining Heater unless the low-NO_x burners are properly installed, maintained, and operated consistent with good air pollution control practice. [IP #0027-I009, V.A.1.c;; §2103.12.a.2.D; §2105.03]
- d. Emissions of nitrogen oxides (NO_x) shall not exceed 0.068 lbs/MMBtu of heat input. [IP #0027-I009, V.A.1.d; §2103.12.a.2.D]

2. Testing Requirements

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [IP #0027-I009, V.A.2; §2103.12.h]

3. Monitoring Requirements

The permittee shall monitor the monthly quantity of natural gas usage of the AOD Relining Heater. Natural gas usage may be proportioned using the existing metering system. [IP #0027-I009, V.A.3; §2103.12.i]

4. Record Keeping Requirements

- a. The permittee shall maintain records of the amount of natural gas usage (monthly and 12-month) for the AOD Relining Heater. [IP #0027-I009, V.A.4.a; §2103.12.a.2.D; 25 PA Code §129.115]
- b. The permittee shall maintain records of operation, maintenance, inspection, calibration, and/or replacement of combustion equipment. [IP #0027-I009, V.A.4.b; §2103.12.j; 25 PA Code §129.115]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [IP #0027-I009, V.A.4.c; §2103.12.j.2; 25 PA Code §129.115]
- d. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [IP #0027-I009, V.A.4.d; §2103.12.j]

5. Reporting Requirements

- a. The permittee shall report noncompliance information required to be recorded by Condition V.K.4.d above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [IP #0027-I009, V.A.5.a; §2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.K.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [IP #0027-I009, V.A.5.b; §2103.12.k.1]

6. Work Practice Standard

The permittee shall not, at any time, operate the AOD Relining Heater unless it is properly operated and maintained according to good engineering and air pollution control practices. [§2105.06; §2105.03; 25 PA Code §129.112(c)(4)]

L. Process P024: Transfer Ladle Heater

Process Description: Transfer Ladle Heater
Facility ID: P024
Capacity: 8.9 MMBtu/hr burner
Fuel: Natural Gas
Control Device(s): North American 4575-9 HiRAM Burners

1. Restrictions

- a. Only commercial-quality natural gas shall be combusted in the transfer ladle heater. [IP #0027-I009,V.B.1.a; §2103.12.a.2.D]
- b. Natural gas usage in the Transfer Ladle Heater shall not exceed a total of 76.44 million cubic feet in any 12 consecutive months. [IP #0027-I009, V.B.1.b; §2103.12.a.2.D]
- c. The permittee shall not operate or allow to be operated the transfer ladle heater unless the low-NO_x burners are properly installed, maintained, and operated consistent with good air pollution control practice. [IP #0027-I009, V.B.1.c; §2103.12.a.2.D; §2105.03; 25 PA Code §129.112(c)(4)]
- d. Emissions of nitrogen oxides (NO_x) shall not exceed 0.068 lbs/MMBtu of heat input. [IP #0027-I009, V.B.1.d; §2103.12.a.2.D]

2. Testing Requirements

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. [§2103.12.h]

3. Monitoring Requirements

The permittee shall monitor the monthly quantity of natural gas usage of the transfer ladle heater. Natural gas usage may be proportioned using the existing metering system. [§2103.12.i]

4. Record Keeping Requirements

- a. The permittee shall maintain records of the amount of natural gas usage (monthly and 12-month) for the Transfer Ladle Heater. [§2103.12.a.2.D; 25 PA Code §129.115]
- b. The permittee shall maintain records of operation, maintenance, inspection, calibration, and/or replacement of combustion equipment. [§2103.12.j]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.115]
- d. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]

5. Reporting Requirements

- a. The permittee shall report noncompliance information required to be recorded by Condition V.L.4.d above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition V.L.5.a above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standard

The permittee shall not, at any time, operate the Transfer Ladle Heater unless it is properly operated and maintained according to good engineering and air pollution control practices. [§2105.06; §2105.03; 25 PA Code §129.112(c)(4)]

M. Process G001: Circulating Water Cooling Towers

Process Description:	Five Cooling Towers [Melt Shop Cooling Tower, three Electro-Slag Remelt (ESR) Furnace Cooling Towers, and the VAR Furnace Cooling Tower]
Capacity:	Recirculation rates: Melt Shop Cooling Tower is 4,200 gallons per minute (gpm), each; ESR Furnace Cooling Tower is 834 gpm; the VAR Furnace is 1,000 gpm
Raw Material(s)/Fuel(s):	Municipal water source
Control Device:	Mist eliminators

1. Restrictions:

- a. The permittee shall properly maintain and operate the subject Cooling Towers at all times according to the following conditions: [§2103.12.a.2.B]
 - 1) The permittee shall only use municipal water in the cooling towers.
 - 2) The Cooling Towers shall be equipped with mist eliminators which shall operate at all times of unit operation.
- b. The total particulate emission rate from the five Cooling Towers shall not exceed an average of 2.44 pounds per hour and 10.7 tons in any consecutive 12-month period. [§2103.12.a.2.B]
- c. Compliance with the emission limitation in Condition V.M.1.b above shall be determined by calculating the monthly average particulate emission rate for each cooling tower from the weekly values of TDS determined in Condition V.M.3 below. The sum of the calculated particulate emission rates shall be compared to the hourly and consecutive 12-month emission limitation in Condition V.M.1.b above.[§2103.12.a.2.B]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above entitled "Emissions Testing." [§2103.12.h.1]

3. Monitoring Requirements:

The total dissolved solids concentration of the service water shall be monitored weekly, at a minimum. [§2103.12.a.2.B, §2103.12.h.1., §2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the records of TDS required to be monitored by Condition V.M.3 above and present such records upon request by the Department. [§2103.12.j]
- b. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.j]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j]

5. Reporting Requirements:

- a. The permittee shall submit semiannual reports in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. Such reports shall include at a minimum: [2103.12.k]
 - 1) Weekly total dissolved solids concentrations;
 - 2) Noncompliance information required by the Department to be recorded in Condition V.M.4.b above.
- b. Reporting instances of noncompliance in accordance with Condition V.M.5.a above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards:

The permittee shall properly maintain and operate the cooling tower according to the manufacturer's specifications and instructions. [§2103.12.a.2.B, §2105.03].

N. Process F002: Plant Roads

Process Description: Plant Roads
Facility ID: F002
Capacity: 1.6 mi. Paved Roads; 0.2 mi. Unpaved Roads; 70,000 sq. ft. Parking Lots
Fuel/Raw Material: N/A
Control Method(s): Wet Suppression; Chemical Treatment; Paved Road Sweeping
Stack I.D.: N/A

1. Restrictions:

- a. The permittee shall take actions to minimize the potential for fugitive emissions from vehicular traffic, including but not limited to, the following: [§2105.49; §2103.12.a.2.B]
 - 1) The removal of soil or other material deposited by trucks or other means on paved areas, including public highways;
 - 2) The use of water sprays and chemical dust suppressants on an as needed basis;
 - 3) Periodic street sweeping of paved areas; and
 - 4) Maintain vehicle speed below ten (10) miles per hour at all times.

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above entitled "Emissions Testing." [§2103.12.h.1]

3. Monitoring Requirements:

- a. The permittee shall monitor: [§2102.04.e, §2103.12.i]
 - 1) The use of water sprays/dust suppressants;
 - 2) Periodic street sweeping of paved areas; and
 - 3) Collect information sufficient to calculate fugitive emission due to the heavy-duty diesel vehicles shall be monitored on a monthly, and 12-month rolling total basis.
- b. The permittee shall perform weekly inspections of the roadways. [§2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall maintain monthly records of: [§2103.12.a.2.B, §2103.12.j]
 - 1) The use of water sprays/dust suppressants; and
 - 2) The periodic street sweeping of paved areas; and
 - 3) Dust control measures taken.
- b. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

5. Reporting Requirements:

None except as specified elsewhere.

6. Work Practice Standards:

None except as specified elsewhere.

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VI. MISCELLANEOUS**A. Sources of Minor Significance**

The following table summarizes the processes and/or activities conducted at the Universal Stainless & Alloy Products, Inc. plant that were determined to be insignificant and/or trivial.

Table VI-1: Insignificant and/or Trivial Processes

I.D.	SOURCE DESCRIPTION	BASIS
P020	Pangborn ES-1850 Crucible Cleaning System with PC02-4 Pangborn Cartridge Collector	Emissions are insignificant
P021	CONSARC Vacuum Arc Remelt (VAR) Furnace	Electric furnace where steel is melted under vacuum. Emissions are insignificant.
P013	Two units Gantry Grinders with Integral Particulate Control Device	Emissions are insignificant
P015	Four units and one spare unit Midwest Grinders with Grinding Building Baghouse	Emissions are insignificant
P019	Western Gear Billet Grinder with Western Gear Billet Grinder Baghouse	Emissions are insignificant
P022	Vulcan Ingot-End Grinder equipped with a Dust Collector	Emissions are insignificant
ACHD No. 5	Three electrically heated laboratory ovens in sample preparation area	No emissions of air contaminants
ACHD Nos. 17, 18, and 21	Plant maintenance and vehicle repair facilities (general repairs, welding, non-solvent cleaning, and metal cutting)	Plant maintenance and upkeep activities (listed trivial activity); insignificant emissions of air contaminants
ACHD No. 20	Handheld equipment for occasional surface grinding or surface finishing of steel products to remove surface imperfections	Handheld equipment for grinding of metal (listed trivial activity); insignificant emissions of air contaminants
ACHD Nos. 39, 40, and 41	Bench-scale laboratory equipment for chemical analysis of steels (four electrically operated element analyzers)	Bench-scale laboratory equipment (listed trivial activity); insignificant emissions of air contaminants
ACHD No. 42	Sampling equipment to withdraw and prepare specimens for analysis (five sample saws, two sample drill presses, seven belt sanders, one grinder wheel unit, two wet surface grinders, three metallographic wet sample polishers, and two sample-machining lathes)	Bench-scale laboratory equipment (listed trivial activity); insignificant emissions of air contaminants
D002	Diesel Storage Tank (1,000 gallons capacity)	Insignificant emissions of air contaminants
D003	Diesel Storage Tank (300 gallons capacity)	Insignificant emissions of air contaminants
D004	Waste Oil Tank (1,000 gallons capacity)	Insignificant emissions of air contaminants

I.D.	SOURCE DESCRIPTION	BASIS
D005	Quench Tank for Clamshell Furnace Bar or Plate	Insignificant emissions of air contaminants
DG001	Cold Degreaser Tub (250 gallons capacity)	Insignificant emissions of air contaminants
-	ESR Stub Welding	Insignificant emissions of air contaminants
-	Transfer Ladle/Vessel Warming Torches	Insignificant emissions of air contaminants
-	Wet Abrasive Cut-Off Saw	Insignificant emissions of air contaminants
-	Acid Etching of Laboratory Samples	Insignificant emissions of air contaminants
-	Spectrum Detroit Diesel Three-Phase 60 kW Emergency Generator	Insignificant emissions of air contaminants
-	Three Electro Slag Remelt Preheat Belchfire Torches	Insignificant emissions of air contaminants
E001	Lime Storage Silo	Insignificant emissions of air contaminants
F001	Melt Shop Slag Pile	Insignificant emissions of air contaminants
V001	Off-Road Vehicles	Insignificant emissions of air contaminants

VII. ALTERNATIVE OPERATING SCENARIOS

A. Melt Shop Slag Processing, Storage, and Handling:

The USAP Bridgeville Plant presently uses an onsite contractor for the processing of slag produced in the Melt Shop. This alternative operating scenario is to allow the plant to conduct the Melt Shop slag processing activities in the event that the use of the onsite contractor is discontinued.

Process Description:	Melt Shop Slag Processing
Facility ID:	F001
Capacity:	27,500 TPY
Fuel/Raw Material:	Steel Slag
Control Method(s):	Wet Suppression

1. Restrictions:

- a. The permittee must ensure that the terms and conditions of each reasonably anticipated alternative operating scenario meet all applicable requirements under Article XXI. [§2103.12.n.2]
- b. The permittee shall conduct the Melt Shop slag processing, Storage and handling operations inside the slag processing building to minimize fugitive emissions in a manner such that emissions from these operations are not visible at or beyond the facility property line at any time. [§2104.05]
- c. The permittee shall take reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to: [§2105.49]
 - 1) the use of asphalt, oil, water, or suitable chemicals for dust control;
 - 2) the paving and maintenance of roadways, parking lots, and the like;
 - 3) the prompt removal of earth and other material which has been deposited by leaks from transport, erosion, or other means; and
 - 4) the adoption of work or other practices to minimize emissions.
- d. The emissions of PM₁₀ from all slag processing operations shall not exceed 1.5 tons in any consecutive 12-month period. [§2103.12.a.2.B; §2104.02.b]

2. Testing Requirements:

The Department reserves the right to require any additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Site Level Condition IV.13 above entitled "Emissions Testing." [§2103.12.h.1]

3. Monitoring Requirements:

- a. Notations of visible emissions from the Melt Shop slag processing, Storage and handling operations shall be performed once per week during normal daylight operations. A trained employee shall record whether any emissions are observed and whether these emissions extend beyond the facility property line. [§2103.12.h.1; §2103.12.i]

- b. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. [§2103.12.h.1; §2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following monthly data for the Melt Shop slag processing, Storage and handling operations: [§2103.12.h.1; §2103.12.j]
 - 1) Dry bulk material throughput (tons/day);
 - 2) Records of visible emission notations as required by Condition VII.A.3.a above; and
 - 3) Records of all dust control measures taken and dates of occurrence.
- b. The permittee shall record all instances of noncompliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. [§2103.12.h.1; §2103.12.j]
- c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2]

5. Reporting Requirements:

- a. The permittee shall report noncompliance information required to be recorded by Condition VII.A.4.b above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. [§2103.12.k.1]
- b. Reporting instances of noncompliance in accordance with Condition VII.A.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. [§2103.12.k.1]

6. Work Practice Standards

- a. The permittee shall not, at any time, conduct Melt Shop slag processing, Storage and handling operations unless all equipment is properly operated and maintained according to good engineering and air pollution control practices. [§2105.03; 25 PA Code §129.97(c)]
- b. If any visible emissions from Melt Shop slag processing, Storage and handling operations are observed to extend beyond the facility property line, the permittee shall take reasonable response steps to control fugitive PM emissions. Failure to take corrective steps shall be considered a deviation from this permit. [§2105.03]

VIII. EMISSIONS LIMITATIONS SUMMARY

The annual emission limitations for the Universal Stainless & Alloy Products, Inc facility are summarized in the following table:

**TABLE VIII-1: Emission Limitations Summary
(Stack and Fugitive)**

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter	107.8
PM ₁₀	80.9
PM _{2.5}	34.6
Nitrogen Oxides	199.1
Sulfur Oxides	12.05
Carbon Monoxide	435.8
Volatile Organic Compounds	44.1
Hazardous Air Pollutants (HAP)	2.43

* A year is defined as any consecutive 12-month period.