



State of Ohio Environmental Protection Agency

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P.O. Box 1049  
Columbus, OH 43216-1049

02/28/01

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

03-70-01-0023  
AK Steel Corporation  
Grady J Medwid  
P.O. Box 247  
913 Bowman Street  
Mansfield, OH 44901-0247

Dear Grady J Medwid:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Northwest District Office.**

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA  
Jim Orlemann, DAPC Engineering  
Michael Ahern, DAPC PMU  
Northwest District Office



## Ohio EPA

State of Ohio Environmental Protection Agency

### DRAFT TITLE V PERMIT

Issue Date: 02/28/01

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance to:

AK Steel Corporation  
913 Bowman Street  
Mansfield, OH 44901

of a Title V permit for Facility ID: 03-70-01-0023

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

B010 (#1 South Plant Boiler)

82 MMBtu/hr Boiler

B011 (#2 South Plant Boiler)

82 MMBtu/hr Boiler

F002 (Plant Roadways and Parking)

Paved and unpaved facility roads and parking areas.

P013 (#2 Pickle Line)

Continuous Pickle Line - Acid Pickling Section

P015 (Tandem Mill)

Tandem Mill

P025 (EAF Lime Storage Bins)

Four lime flux storage bins in EAF Melt Shop w/baghouse

P062 (Thin Slab Continuous Caster)

Thin Slab Continuous Caster, Cut-off Torches, Tundish Dryer and Preheater

P063 (Slab Reheat Furnace)

Slab Reheat Furnace

P902 (#8 Electric Arc Furnace)

Electric Arc Furnace

P903 (#9 Electric Arc Furnace)

Electric Arc Furnace

P904 (Ladle Metallurgical Furnace)

Ladle Metallurgical Furnace

P924 (AOD Vessel and Preheater)

Argon-Oxygen Decarborization Vessel and Preheater

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419) 352-8461

## OHIO ENVIRONMENTAL PROTECTION AGENCY

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Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-

annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

## **4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

## **5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the

Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the 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 federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

## **8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

## **9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

## **10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

## **11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

## **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC

rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

#### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

#### **15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### **16. Off Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

## **17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

## **18. Insignificant Activity**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

## **B. State Only Enforceable Section**

### **1. Permit to Install Requirement**

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### **3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

### **4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## **Part II - Specific Facility Terms and Conditions**

### **A. State and Federally Enforcable Section**

**None**

### **B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

P009 Hot Strip Mill  
Z007 Continuous Caster Cooling Water  
Z008 Continuous Caster Scale Pit  
Z009 Hot Mill Water Treatment Pond  
Z012 Melt Shop Alloy Bays & Bins  
Z013 #1 Hot Strip Bearing Room Cold Degreaser  
Z014 #2 Hot Strip Bearing Room Cold Degreaser  
Z015 Cold Mill Bearing Room Cold Degreaser  
Z017 Evaporator for Oil Recovery  
Z026 AOD Lime Storage Bins  
Z031 Hydraulic Shop Degreaser  
Z001 #1 Ladle Preheater  
Z002 #2 Ladle Preheater  
Z004 #3 Ladle Preheater  
Z005 #4 Ladle Preheater  
Z016 Cold Solvent Cleaners  
Z030 #0 Ladle Preheater

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #1 South Plant Boiler (B010)  
**Activity Description:** 82 MMBtu/hr Boiler

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
82 mmBtu/hr, natural gas and/or no. 2 fuel oil-fired boiler (South Plant boiler No. 1)	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-18-06(D)	1.6 lbs SO <sub>2</sub> /mmBtu of actual heat input

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The permittee shall burn only natural gas and/or no. 2 fuel oil in this emissions unit.
- The quality of oil burned in this emissions unit shall meet a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs/mmBtu of actual heat input.

##### III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas and/or no. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emissions rate (in lbs/mmBtu). (The sulfur dioxide emissions rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch and the quality of the oil for those loads may be represented by a single batch analysis from the supplier. Also, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of oil during a calendar month.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or no. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section A.1 of this permit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.

### V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

When firing natural gas, the permittee may determine compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (82 mmBtu/hr).

When firing no. 2 fuel oil, and/or a combination of no. 2 fuel oil and natural gas, the permittee may determine compliance by multiplying the maximum hourly fuel oil consumption rate (gallons/hr) by the emission factor from AP-42, Table 1.3-1 (revised 9/98) of 2.0 lbs PE (filterable)/1000 gallons of oil used, and then dividing by the maximum heat input capacity of the boiler (82 mmBtu/hr).

If required, compliance with the PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

## **V. Testing Requirements (continued)**

- 1.c** Emission Limitation: 1.6 pounds sulfur dioxide/mmBtu of actual heat input

Applicable Compliance Method: When firing fuel oil, except as provided below, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon an average for the calendar month of the calculated sulfur dioxide emission rates for all of the shipments during the calendar month.

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, compliance with the limitation above shall be determined in accordance with Method 6 of 40 CFR, Part 60, Appendix A.

## **VI. Miscellaneous Requirements**

1. The permittee installed this emissions unit in June 1974 without first applying for and obtaining a Permit to Install (PTI), in violation of OAC rule 3745-31-02. Therefore, the permittee shall perform the following in order to bring the emissions unit into compliance:
  - a. submit a complete PTI application within 2 months of the issuance of this permit; and
  - b. obtain a PTI within 8 months following the issuance of this permit.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #2 South Plant Boiler (B011)  
**Activity Description:** 82 MMBtu/hr Boiler

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
82 mmBtu/hr, natural gas and/or no. 2 fuel oil-fired boiler (South Plant boiler No. 2)	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-18-06(D)	1.6 lbs SO <sub>2</sub> /mmBtu of actual heat input

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The permittee shall burn only natural gas and/or no. 2 fuel oil in this emissions unit.
- The quality of oil burned in this emissions unit shall meet a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs/mmBtu of actual heat input.

##### III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas and/or no. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emissions rate (in lbs/mmBtu). (The sulfur dioxide emissions rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch and the quality of the oil for those loads may be represented by a single batch analysis from the supplier. Also, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of oil during a calendar month.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or no. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section A.1 of this permit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.

### V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

When firing natural gas, the permittee may determine compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (82 mmBtu/hr).

When firing no. 2 fuel oil, and/or a combination of no. 2 fuel oil and natural gas, the permittee may determine compliance by multiplying the maximum hourly fuel oil consumption rate (gallons/hr) by the emission factor from AP-42, Table 1.3-1 (revised 9/98) of 2.0 lbs PE (filterable)/1000 gallons of oil used, and then dividing by the maximum heat input capacity of the boiler (82 mmBtu/hr).

If required, compliance with the PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

## **V. Testing Requirements (continued)**

- 1.c** Emission Limitation: 1.6 pounds sulfur dioxide/mmBtu of actual heat input

Applicable Compliance Method: When firing fuel oil, except as provided below, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon an average for the calendar month of the calculated sulfur dioxide emission rates for all of the shipments during the calendar month.

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, compliance with the limitation above shall be determined in accordance with Method 6 of 40 CFR, Part 60, Appendix A.

## **VI. Miscellaneous Requirements**

1. The permittee installed this emissions unit in June 1974 without first applying for and obtaining a Permit to Install (PTI), in violation of OAC rule 3745-31-02. Therefore, the permittee shall perform the following in order to bring the emissions unit into compliance:
  - a. submit a complete PTI application within 2 months of the issuance of this permit; and
  - b. obtain a PTI within 8 months following the issuance of this permit.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Plant Roadways and Parking (F002)  
**Activity Description:** Paved and unpaved facility roads and parking areas.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking areas (see Section A.1.2.a.)	OAC rule 3745-17-07(B)(4)	no visible particulate emissions except for 6 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(8), (B)(9)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.1.2.c, A.1.2.d, and A.1.2.f through A.1.2.j)
unpaved roadways and parking areas (see Section A.1.2.b.)	OAC rule 3745-17-07(B)(5)	no visible particulate emissions except for 13 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(2)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j)

##### 2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Paved roadways and parking areas identifications:

- P1
- P2
- P3
- P4
- P5
- P6
- P7
- P8
- P9
- P10

## **2. Additional Terms and Conditions (continued)**

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Unpaved roadways and parking areas identifications:

U1

U2

- 2.c** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with chemical stabilization at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas using chemical stabilization at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## **II. Operational Restrictions**

**None**



**V. Testing Requirements**

1. Compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

## Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #2 Pickle Line (P013)  
**Activity Description:** Continuous Pickle Line - Acid Pickling Section

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
no. 2 continuous pickle line, with wet scrubber	OAC rule 3745-17-07(A)	20 percent opacity, as a six-minute average, except as provided by rule
	OAC rule 3745-17-11(B)	13.6 lbs particulate emissions (PE)/hr
	OAC rule 3745-31-05 (PTI #03-0406)	8.16 lbs hydrochloric acid (HCl) mist/hr 35.74 tons per year HCl mist
		0.036 lb sulfuric acid (H <sub>2</sub> SO <sub>4</sub> ) mist/hr 0.15 ton per year H <sub>2</sub> SO <sub>4</sub> mist
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B) and 3745-17-07(A).

#### 2. Additional Terms and Conditions

- 2.a The permittee shall employ a wet scrubber to control all of the PE and H<sub>2</sub>SO<sub>4</sub> and HCl emissions from this emissions unit. The wet scrubber shall have a minimum overall control efficiency of 97 percent (by weight) for H<sub>2</sub>SO<sub>4</sub> and for HCl, individually.

#### II. Operational Restrictions

1. The wet scrubber water supply pressure shall be continuously maintained at a value of not less than 1.50 pounds per square inch (gauge) at all times while the emissions unit is in operation.
2. The wet scrubber water flow rate shall be continuously maintained at a value of not less than 8.70 gallons per minute at all times while the emissions unit is in operation.
3. The pH of the wet scrubber liquor shall be maintained within the range established during the most recent emission testing that demonstrated the emissions unit was in compliance.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor and record the water supply pressure, the water flow rate and the pH of the scrubber liquor while the emissions unit is in operation. The monitoring devices and recorder(s) shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. The water supply pressure, in psig, on a daily basis.
- b. The water flow rate, in gpm, on daily basis.
- c. The pH of the scrubber liquor, on a once/shift basis.
- d. A log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
  - a. The water supply pressure.
  - b. The water flow rate.
  - c. The scrubber liquor pH.

All quarterly reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

### V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, hydrochloric acid and sulfuric acid, and the control efficiency of the wet scrubber.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. PE: Methods 1 - 5, 40 CFR Part 60, Appendix A;
    - ii. hydrochloric acid: Method 26, 40 CFR Part 60, Appendix A; and
    - iii. sulfuric acid: Method 8, 40 CFR Part 60, Appendix A.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

**2.** During the emission testing required above, the permittee shall record the pH of the scrubber liquor every 5 minutes.

**3.** Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

**3.a** Emission limitation:  
13.6 lbs PE/hr

Applicable compliance method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

**3.b** Emission Limitation: 20 percent opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

**3.c** Emission limitations: 8.16 lbs HCl mist/hr and 35.74 tons per year HCl mist

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 26.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

**3.d** Emission limitations: 0.036 lb H<sub>2</sub>SO<sub>4</sub> mist/hr and 0.15 ton per year H<sub>2</sub>SO<sub>4</sub> mist

Applicable compliance method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 8.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

## Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Tandem Mill (P015)  
**Activity Description:** Tandem Mill

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
tandem mill, with settling chamber	OAC rule 3745-17-07 (A)  OAC rule 3745-17-11(B)(1)	20 percent opacity, as a six-minute average, except as provided by rule  4.96 lbs particulate emissions (PE)/hr

#### 2. Additional Terms and Conditions

- 2.a The permittee shall employ a settling chamber to control all of the PE from this emissions unit.

#### II. Operational Restrictions

None

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack associated with this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of each visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

#### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

1.a Emission Limitation: 20 percent opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

1.b Emission limitation: 4.96 lbs PE/hr

Applicable compliance method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

The permittee may demonstrate compliance with the hourly PE limitation by multiplying the maximum process weight rate (100 tons per hour) by an emission factor of 0.31 lb PE/ton\*, and then multiplying by a control factor of (1.0 - 0.9).\*\*

\* This emission factor was derived based upon the results of emission testing conducted, in September 1995, on a similar emissions unit at an AK Steel facility in Butler, PA.

\*\* The control efficiency of the settling chamber is estimated to be 90%.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EAF Lime Storage Bins (P025)  
**Activity Description:** Four lime flux storage bins in EAF Melt Shop w/baghouse

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
EAF lime flux storage bin, with baghouse	OAC rule 3745-17-07(A)	20 percent opacity, as a six-minute average, except as provided by rule
	OAC rule 3745-17-11(B)	7.68 lbs particulate emissions (PE)/hr

##### 2. Additional Terms and Conditions

- The permittee shall employ a baghouse to control all of the PE from this emissions unit.

The baghouse employed shall achieve an outlet emission rate of not greater than 0.0052 grain of PE per dry standard cubic foot of exhaust gases. The baghouse controlling this emissions unit also serves as control equipment for emissions unit P902 and is subject to an outlet grain loading limitation of 0.0052 gr/dscf and an opacity limitation of 3%, pursuant to 40 CFR, Part 60, Subpart AAa.

##### II. Operational Restrictions

None

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall conduct visible emissions (VE) observations for the baghouse serving this emissions unit in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
- The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P902, P903 and P904) are operating in the melting and refining period.
- The VEs shall be taken for at least three 6-minute periods. The opacities 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 the visible emissions, only one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause or location of visible emissions observed during a single incident.
- The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verify that their Method 9 certifications are up-to-date.

#### **IV. Reporting Requirements**

1. The permittee shall submit semiannual written reports which (a) identify all days during which the opacity limitation for the baghouse was exceeded and (b) describe any corrective actions taken to eliminate the opacity exceedances. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation: 20 percent opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method: If required, compliance with the VE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission limitation: 7.68 lbs PE/hr

Applicable compliance method:

The permittee shall be deemed to be in compliance with the hourly limitation for this emissions unit if the results of the emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P902 shows a PE grain loading not exceeding 0.0052 grain per dry standard cubic foot of exhaust gases.

The permittee may determine compliance with the hourly PE limitation by multiplying the maximum process weight rate (tons/hr) by the emission factor from AP-42, Table 11.17-4 [for product transfer and conveying] of 2.2 lbs PE/ton (uncontrolled), and then multiplying by a control factor of (1.0 - 0.99).\*

If required, the permittee shall demonstrate compliance in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

\* The control efficiency of the baghouse is estimated to be 99%.

- 1.c Emission Limitation:  
0.0052 gr/dscf (from the baghouse stack)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P902.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Thin Slab Continuous Caster (P062)

**Activity Description:** Thin Slab Continuous Caster, Cut-off Torches, Tundish Dryer and Preheater

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
thin slab continuous caster, with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05 (PTI 03-7503)	1.13 lbs PE/hr (from the baghouse stack) 4.95 tons PE/yr (from the baghouse stack)
		0.85 lb PM10/hr (from the baghouse stack) 3.72 ton PM10/yr (from the baghouse stack)  0.0022 grain PE/dscf (from the baghouse stack)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

##### 2. Additional Terms and Conditions

- 2.a The permittee shall employ a baghouse to control all of the PE from this emissions unit.

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2.0 to 5.0 inches of water while the emissions unit is in operation.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of each visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation: 20 percent opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitations:  
1.13 lbs PE/hr and 4.95 tons PE/yr

Applicable compliance method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The permittee may determine compliance with the hourly PE limitation by multiplying the maximum process weight rate (tons/hr) by the emission factor of 0.27 lb PE/ton (uncontrolled)\*, and then multiplying by a control factor of (1.0 - 0.99).\*\*

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

\* This emission factor was derived based upon the results of emission testing conducted on April 30, 1996 for this emissions unit.

\*\* The control efficiency of the baghouse is estimated to be 99%.

## V. Testing Requirements (continued)

- 1.c** Emission Limitations:  
0.85 lb PM10/hr and 3.72 tons PM10/yr

Applicable compliance method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A (including back half and size distribution) or Methods 201 or 201A.

The permittee may determine compliance with the hourly PE limitation by multiplying the maximum process weight rate (tons/hr) by the emission factor of 0.27 lb/ton (uncontrolled)\*, and then multiplying by a control factor of (1.0 - 0.99).\*\*

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

\* This emission factor was derived based on the results of emission testing conducted on April 30, 1996 for this emissions unit (all PE will be assumed to be PM10).

\*\*\* The control efficiency of the baghouse is estimated to be 99%.

- 1.d** Emission Limitation:  
0.0022 grain PE/dscf (from the baghouse stack)

Applicable compliance method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 3 months after issuance of the permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and PM10.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A; and
    - ii. PM10: Methods 1 - 5 of 40 CFR Part 60, Appendix A (including back half and size distribution) or Methods 201 or 201A.

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Slab Reheat Furnace (P063)  
**Activity Description:** Slab Reheat Furnace

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
315 mmBtu/hr, natural gas-fired slab reheat furnace	OAC rule 3745-31-05 (PTI #03-7606)	12.02 lbs nitrogen oxides (NOx)/hr  1.27 lbs particulate emissions (PE)/hr  0.96 lb PM10/hr  2.53 lbs carbon monoxide (CO)/hr
	OAC rule 3745-17-07	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).  Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The permittee shall burn only natural gas in this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack associated with this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of each visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the the stack associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

### V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing for NO<sub>x</sub> shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
  - b. The emission testing for CO, PE and PM<sub>10</sub> shall be conducted within 3 months after issuance of the permit.
  - c. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub>, CO, PE and PM<sub>10</sub>.
  - d. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. NO<sub>x</sub>: Method 7 of 40 CFR Part 60, Appendix A;
    - ii. PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A;
    - iii. CO: Method 10 of 40 CFR Part 60, Appendix A; and
    - iv. PM<sub>10</sub>: Methods 1 - 5 of 40 CFR Part 60, Appendix A (including back half and size distribution) or Methods 201 or 201A.

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

- e. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## V. Testing Requirements (continued)

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):
- 3.a Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

- 3.b Emission Limitation:  
12.02 lbs NO<sub>x</sub>/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- 3.c Emission Limitation:  
2.53 lbs CO/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- 3.d Emission Limitation:  
1.27 lbs PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 5.

- 3.e Emission Limitation:  
0.96 lb PM<sub>10</sub>/hr

Applicable Compliance Method: .

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A (including back half and size distribution) or Methods 201 or 201A.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #8 Electric Arc Furnace (P902)  
**Activity Description:** Electric Arc Furnace

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#8 electric arc furnace, 125-ton holding capacity, with baghouse	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-07(B)	See A.I.2.a.
	OAC rule 3745-17-11(B)	See A.I.2.b.
	OAC rule 3745-17-08	See A.I.2.g.
	OAC rule 3745-18-06(E)	See A.I.2.c
	OAC rule 3745-31-05(A) (PTI 03-7726)	12.3 lbs particulate emissions (PE)/hr [from the baghouse serving this emissions unit]
		52.7 tons PE/yr [from the baghouse serving this emissions unit]
		93.2 lbs carbon monoxide (CO)/hr [from the baghouse serving this emissions unit]
		901.1 tons CO/rolling, 12-month period (for emissions units P902 and P903, combined)
		40.8 lbs nitrogen oxidex (NOx)/hr [from the baghouse serving this emissions unit]
	394.1 tons NOx/rolling, 12-month period (for emissions units P902 and P903, combined)	
	1.6 lbs sulfur dioxide (SO <sub>2</sub> )/hr [from the baghouse serving this emissions unit]	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
		7.0 tons SO <sub>2</sub> /yr [from the baghouse serving this emissions unit]
		14.2 lbs volatile organic compounds (VOC)/hr [from the baghouse serving this emissions unit]
		62.4 tons VOC/yr [from the baghouse serving this emissions unit]
		0.007 lb lead (Pb)/hr [from the baghouse serving this emissions unit]
		0.03 ton Pb/yr [from the baghouse serving this emissions unit]
		0.0007 lb mercury (Hg)/hr [from the baghouse serving this emissions unit]
		0.003 ton Hg/yr [from the baghouse serving this emissions unit]
		0.06 lb fluoride (F)/hr [from the baghouse serving this emissions unit]
		0.26 ton F/Yr [from the baghouse serving this emissions unit]
	40 CFR 60, Subpart AAa	See A.1.2.d and e.

**2. Additional Terms and Conditions**

- 2.a** The VE limitation specified by this rule is less stringent than the limitation established pursuant to 40 CFR, Subpart AAa.
- 2.b** The PE limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c** The SO<sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.d** The permittee shall not cause to be discharged into the atmosphere gases from the electric arc furnace (EAF) which:
  - i. exit from the baghouse and contain PE in excess of 12 milligrams (mg)/dry standard cubic meter (dscm) [0.0052 gr/dscf];
  - ii. exit from the baghouse and exhibit 3 percent opacity or greater, as a 6-minute average; and
  - iii. exit from the shop [the building housing one or more EAFs and/or argon-oxygen decarbonization (AOD) vessels] and, due solely to the operations of any affected EAF or AOD vessel(s), exhibit 6 percent opacity or greater, as a 6-minute average.
- 2.e** The permittee shall not cause to be discharged into the atmosphere from the dust handling system any gases which exhibit 10 percent opacity or greater, as a 6-minute average.

## **2. Additional Terms and Conditions (continued)**

- 2.f** The permittee shall not cause to be discharged fugitive PE from the melt shop and dust silos attributed to the EAFs (emissions units P902 and P903, combined) in excess of 19.8 tons per year.
- 2.g** The RACM requirements specified by this rule are less stringent than the control measures/requirements established pursuant to 40 CFR 60, Subpart AAa.

## **II. Operational Restrictions**

- 1.** The maximum pressure in the free space inside the EAF and the control system's fan motor amperes range, when the EAF is operating in the meltdown and refining periods, shall not exceed the following:
  - a. static pressure : - 0.0060 inch of water; and
  - b. fan motor amperes ranges:
    - i. #1 fan (amps): 136 to 278; and
    - ii. #2 fan (amps): 134 to 273.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** In lieu of installing a continuous monitoring system for measurement of opacity, observations of the opacity of the visible emissions (VEs) from the baghouse shall be performed by a certified VE observer as follows:
  - a. The VE observations from the baghouse serving this emissions unit shall be conducted in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - b. The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P902, P903 and P904) are operating in the melting and refining period.
  - c. The VEs shall be taken for at least three 6-minute periods. The opacities 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 the visible emissions, only one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause or location of visible emissions observed during a single incident.
  - d. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verify that their Method 9 certifications are up-to-date.
- 2.** The permittee shall check and record on a once-per-shift basis the furnace static pressure, in inches of water, and either: check and record the control system fan motor amperes and damper positions on a once-per-shift basis; install, calibrate, operate 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 and check and record damper positions on a once-per-shift basis. The monitoring devices may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of +/-10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The permittee may be required to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of appendix A of 40 CFR Part 60.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. When the permittee is required to demonstrate compliance with the VE limitation in section A.I.2.d.iii. and at any other time, the Director (the appropriate Ohio EPA District Office or local air agency) may require that either the control system fan motor amperes and all damper positions, or the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions.

The permittee may petition the Director for reestablishment of these parameters whenever the permittee can demonstrate to 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 levels for each applicable period. Operation at other than baseline values will be considered by the Director (the appropriate Ohio EPA District Office or local air agency) to be unacceptable operation and maintenance of the control system.

4. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). These inspections 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 recorded and proper maintenance performed. The permittee may petition the Director (the appropriate Ohio EPA District Office or local air agency) to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.
5. The permittee shall calibrate, operate and maintain monitoring devices that allow the pressure in the free space inside the EAF to be monitored. The monitoring devices may be installed in any appropriate location in the EAF's ducts prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring devices shall have an accuracy of +/-5 mm of water gauge over their normal operating range and shall be calibrated according to the manufacturer's instructions.
6. Except as provided for in section A.III.7, when the permittee of an EAF controlled by a direct-shell evacuation control (DEC) system is required to demonstrate compliance with the VE limitation in section A.I.2.d.iii, and at any other time the Director (the appropriate Ohio EPA District Office or local air agency) may require, the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required pursuant to section A.III.5 above. The permittee may petition the Director (the appropriate Ohio EPA District Office or local air agency) for reestablishment of the pressure whenever the permittee can demonstrate to the the Director's (the appropriate Ohio EPA District Office's or local air agency'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 Director (the appropriate Ohio EPA District Office or local air agency) to be unacceptable operation and maintenance of the affected facility.

Based upon the most recent demonstration of compliance, both the maximum pressure (i.e., the pressure shall not be any more positive) in the free space inside the EAF and the control systems fan motor amperes range, when the EAF was operating in the meltdown and refining periods, are identified below:

- a. static pressure : - 0.0060 inch of water; and
- b. fan motor amperes ranges:
  - i. #1 fan (amps): 136 to 278; and
  - ii. #2 fan (amps): 134 to 273.

### III. Monitoring and/or Record Keeping Requirements (continued)

7. 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 must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

The permittee shall maintain daily records of all shop opacity observations.

8. The permittee shall calculate and maintain each month the following information for emissions units P902 and P903, combined.
- a. the number of melts that occurred;
  - b. the type of steel produced in each melt (carbon and/or stainless steel);
  - c. the tons of steel produced in each melt;
  - d. the total tons of each type of steel produced;
  - e. the total CO emissions, in tons, calculated as follows:
    - i. for stainless steel, multiply the amount of stainless steel produced, in tons (from section 8.d.) by the emission factor of 1.3 lbs CO/ton of steel produced\*, and then divide by 2000;
    - ii. for carbon steel, multiply the amount of carbon steel produced, in tons (from section 8.d.) by the emission factor of 1.7 lbs CO/ton of steel produced\*, and then divide by 2000; and
    - iii. add e.i. + e.ii.
- \* based upon the results of the most recent emission testing conducted for this emissions unit
- f. the total NO<sub>x</sub> emissions, in tons, calculated as follows:
    - i. for stainless steel, multiply the amount of stainless steel produced, in tons (from section 8.d.) by the emission factor of 0.66 lb NO<sub>x</sub>/ton of steel produced\*, and then divide by 2000;
    - ii. for carbon steel, multiply the amount of carbon steel produced, in tons (from section 8.d.) by the emission factor of 0.43 lb NO<sub>x</sub>/ton of steel produced\*, and then divide by 2000; and
    - iii. add f.i. + f.ii.
- \* based on the results of the most recent emission testing conducted for this emissions unit
- g. the rolling, 12 month summation of the monthly CO emission rates, in tons; and
  - h. the rolling, 12-month summation of the monthly NO<sub>x</sub> emission rates; in tons.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which the opacity limitation for the baghouse was exceeded and (b) describe any corrective actions taken to eliminate the opacity exceedances. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the static pressure in the free space inside the furnace exceeded the values in section A.II.1 of this permit;
  - b. all periods of time during which any of the control system fan motor ampere values were outside the ranges in section A.II.1 of this permit; and
  - c. all periods of time during which the hoods and/or the baghouse were operated at volumetric flow rates lower than those established in section A.III.3 of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the shop opacity observations were in excess of the limit specified in section A.I.2.d.iii of this permit.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the limitations (for emissions units P902 and P903, combined) of 901.1 tons of CO/rolling, 12-month period and 394.1 tons of NOx/rolling, 12-month period.
5. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

#### V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Hg, CO, PE, NOx and VOC. The permittee shall be deemed to be in compliance with the 12.3 lbs PE/hr and 0.0052 grain PE/dscf limitations for this emissions unit and the hourly and/or grain loading PE limitations for the other emissions unit (i.e., P025) vented to this baghouse only if the testing pursuant to this term and condition shows a PE grain loading not exceeding 0.0052 grain per dry standard cubic foot of exhaust gases.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. Hg: Method 29 of 40 CFR, Part 60, Appendix A;
    - ii. PE: Method 5D of 40 CFR, Part 60, Appendix A;
    - iii. NOx: Method 7 of 40 CFR Part, 60, Appendix A;
    - iv. CO: Method 10 of 40 CFR, Part 60, Appendix A; and
    - v. VOC: Methods 18, 25, or 25A of 40 CFR, Part 60, Appendix A.
  - d. The test(s) for PE shall be conducted while emissions units P902 and P025 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - e. The tests for Hg, NOx, CO and VOC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. The tests may be conducted on the gas stream exiting this emissions unit or at the inlet to the baghouse before it combines with the gas streams from the other emissions unit.

## V. Testing Requirements (continued)

\* Testing for Hg emissions shall be performed while melting the maximum amount possible of no. 2 bundles and frag scrap.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. The written report described in section A.V.1. above, for the results of the PE testing, shall also include the following information:
  - a. facility name and address;
  - b. plant representative;
  - c. make and model of process, control device, and continuous monitoring equipment;
  - d. flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
  - e. rated (design) capacity of process equipment;
  - f. list of charge and tap weights and materials;
  - g. heat times, including start and stop times and a log of process operation, including periods of no operation during testing and the pressure inside the EAF's direct shell evacuation control system;
  - h. control device operating log;
  - i. reference Method 9 data;
  - j. test dates and test times;
  - k. test company;
  - l. test company representative;
  - m. test observers from outside agency;
  - n. description of test methodology used, including any deviation from standard reference methods;
  - o. schematic of sampling location;
  - p. number of sampling points;
  - q. description of sampling equipment;
  - r. listing of sampling equipment calibrations and procedures;
  - s. field and laboratory data sheets;
  - t. description of sample recovery procedures;
  - u. sampling equipment leak check results;
  - v. description of quality assurance procedures;
  - w. notation of sample blank corrections; and
  - x. sample emission calculations.

## V. Testing Requirements (continued)

3. During the emission testing required in section A.V.1., the permittee shall also perform the following:
- a. 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;
  - b. obtain and record the information required in sections A.III.3, A.III.6 and A.III.7; and
  - c. record the following information for all heats covered by the emission testing:
    - i. the charge weights and materials, and tap weights and materials; and
    - ii. the heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside during testing and the pressure inside during testing and the pressure inside.
4. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
- 4.a** Emission Limitations:  
12.3 lbs of PE/hr and 52.7 tons of PE/yr
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of this permit.
- Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).
- 4.b** Emission Limitation:  
901.1 tons CO/rolling, 12-month period (for emissions units P902 and P903, combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the emission limitation above through the record keeping requirements specified in section A.III.8 of this permit.
- 4.c** Emission Limitation:  
394.1 tons NOx/rolling, 12-month period (for emissions units P902 and P903, combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the annual emission limitation above through the record keeping requirements specified in section A.III.8 of this permit.

## V. Testing Requirements (continued)

**4.d** Emission Limitation:  
19.8 tons fugitive PE/yr

Applicable Compliance Method:

The permittee may determine compliance with the annual fugitive PE limitation as follows:

i. multiply the maximum annual production rate (tons/yr) by the emission factor of 1.4 lbs fugitive PE/ton [for charging, tapping and slagging, from AP-42, Table 7.5-1(revised 10/86)], and then multiply by a control factor of  $(1-.98)^*$ ;

ii. multiply the maximum annual production rate (tons/yr) by an emission factor of 0.12 lb fugitive PE/ton [for Metallic Mineral Processing, Material Handling and Transfer, from AP-42, Table 8.23-1(revised 8/82)], and then multiply by a control factor of  $(1-0.9)^{**}$ ; and

iii. add d.i + d.ii.

\* The capture efficiency supplied by the company is estimated to be 98%.

\*\* The capture efficiency supplied by the company is estimated to be 90%.

**4.e** Emission Limitation:  
40.8 lbs of NOx/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**4.f** Emission Limitations:  
1.6 lbs of SO<sub>2</sub>/hr and 7.0 tons of SO<sub>2</sub>/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor from section A.VI.1 of this permit.

If required, the permittee shall demonstrate compliance with the hourly SO<sub>2</sub> emission limitation in accordance with 40 CFR, Part 60, Appendix A, Method 6.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

**4.g** Emission Limitations:  
14.2 lbs of VOC/hr and 62.4 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25 or 25A.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly emission limitation by 8760 and then dividing by 2000).

## V. Testing Requirements (continued)

- 4.h** Emission Limitations:  
0.007 lb of Pb/hr and 0.03 ton of Pb/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor from section A.VI.1 of this permit.

If required, the permittee shall demonstrate compliance with the hourly Pb emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 29.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 4.i** Emission Limitations:  
0.0007 lb of Hg/hr and 0.003 ton of Hg/yr

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of this permit.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 4.j** Emission Limitations:  
0.06 lb of F/hr and 0.26 ton of F/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor identified in section A.VI.1 of this permit.

If required, the permittee shall demonstrate compliance with the hourly FI emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 13.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 4.k** Emission Limitation:  
12 mg/dscm (0.0052 gr/dscf) from the baghouse

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 5.

- 4.l** Emission Limitation:  
3 percent opacity, as a 6-minute average (from the baghouse)

**Applicable Compliance Method:**

If required, the permittee shall determine compliance with the opacity restriction above in accordance with 40 CFR, Part 60, Appendix A, Method 9.

## V. Testing Requirements (continued)

**4.m** Emission Limitation:  
6 percent opacity, as a 6-minute average (from a shop and, due solely to the operations of any affected EAF vessel(s))

Applicable Compliance Method:

If required, the permittee shall determine compliance with the opacity restriction above in accordance with 40 CFR, Part 60, Appendix A, Method 9.

**4.n** Emission Limitation:  
10 percent opacity, as a 6-minute average (from the dust handling system)

Applicable Compliance Method:

If required, the permittee shall determine compliance with the opacity restriction above in accordance with 40 CFR, Part 60, Appendix A, Method 9.

**4.o** Emission Limitation:  
93.2 lbs of CO/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10. The permittee may also demonstrate compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor from section A.VI.1 of this permit.

## VI. Miscellaneous Requirements

1. The following emission factors were derived from the results of emission testing conducted at this facility, from 1995 through 1997, during the production of both carbon and stainless steel. These emission factors are based on the highest emission rate obtained for each pollutant during testing for both carbon and stainless steel (the emission factors below shall continually be updated based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance):

carbon steel -

CO: 1.7 lbs/ton

NOx: 0.43 lb/ton

VOC: 0.16 lb/ton

SO<sub>2</sub>: 0.009 lb/ton

lead: 0.00004 lb/ton

mercury: 0.00002 lb/ton

fluoride: 0.0009 lb/ton

stainless steel-

CO: 1.3 lbs/ton

NOx: 0.66 lb/ton

VOC: 0.23 lb/ton

SO<sub>2</sub>: 0.03 lb/ton

lead: 0.0001 lb/ton

mercury: 0.00001 lb/ton

fluoride: 0.0004 lb/ton

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #9 Electric Arc Furnace (P903)  
**Activity Description:** Electric Arc Furnace

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#9 electric arc furnace, 125-ton holding capacity, with baghouse	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-07(B)	See A.I.2.a.
	OAC rule 3745-17-11(B)	See A.I.2.b.
	OAC rule 3745-17-08	See A.I.2.g.
	OAC rule 3745-18-06(E)	See A.I.2.c
	OAC rule 3745-31-05(A) (PTI 03-7726)	16.08 lbs particulate emissions (PE)/hr [from the baghouse serving this emissions unit]
		70.4 tons PE/yr [from the baghouse serving this emissions unit]
		112.6 lbs carbon monoxide (CO)/hr [from the baghouse serving this emissions unit]
		901.1 tons CO/rolling, 12-month period (for emissions units P902 and P903, combined)
		49.2 lbs nitrogen oxidex (NOx)/hr [from the baghouse serving this emissions unit]
	394.1 tons NOx/rolling, 12-month period (for emissions units P902 and P903, combined)	
	1.9 lbs sulfur dioxide (SO2)/hr [from the baghouse serving this emissions unit]	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
		8.4 tons SO <sub>2</sub> /yr [from the baghouse serving this emissions unit]
		17.1 lbs volatile organic compounds (VOC)/hr [from the baghouse serving this emissions unit]
		75.2 tons VOC/yr [from the baghouse serving this emissions unit]
		0.008 lb lead (Pb)/hr [from the baghouse serving this emissions unit]
		0.04 ton Pb/yr [from the baghouse serving this emissions unit]
		0.0009 lb mercury (Hg)/hr [from the baghouse serving this emissions unit]
		0.004 ton Hg/yr [from the baghouse serving this emissions unit]
		0.07 lb fluoride (F)/hr [from the baghouse serving this emissions unit]
		0.32 ton FI/Yr [from the baghouse serving this emissions unit]
	40 CFR 60, Subpart AAa	See A.1.2.d and e.

**2. Additional Terms and Conditions**

- 2.a** The VE limitation specified by this rule is less stringent than the limitation established pursuant to 40 CFR, Subpart AAa.
- 2.b** The PE limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c** The SO<sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.d** The permittee shall not cause to be discharged into the atmosphere gases from the electric arc furnace (EAF) which:
  - i. exit from the baghouse and contain PE in excess of 12 milligrams (mg)/dry standard cubic meter (dscm) [0.0052 gr/dscf];
  - ii. exit from the baghouse and exhibit 3 percent opacity or greater, as a 6-minute average; and
  - iii. exit from the shop [the building housing one or more EAFs and/or argon-oxygen decarbonization (AOD) vessels] and, due solely to the operations of any affected EAF or AOD vessel(s), exhibit 6 percent opacity or greater, as a 6-minute average.
- 2.e** The permittee shall not cause to be discharged into the atmosphere from the dust handling system any gases which exhibit 10 percent opacity or greater, as a 6-minute average.

## **2. Additional Terms and Conditions (continued)**

- 2.f** The permittee shall not cause to be discharged fugitive PE from the melt shop and dust silos attributed to the EAFs (emissions units P902 and P903, combined) in excess of 19.8 tons per year.
- 2.g** The RACM requirements specified by this rule are less stringent than the control measures/requirements established pursuant to 40 CFR 60, Subpart AAa.

## **II. Operational Restrictions**

- 1.** The maximum pressure in the free space inside the EAF and the control system's fan motor amperes range, when the EAF is operating in the meltdown and refining periods, shall not exceed the following:
  - a. static pressure : + 0.0981inch of water; and
  - b. fan motor amperes ranges:
    - i. #1 fan (amps): 173 to 265;
    - ii. #2 fan (amps): 157 to 265; and
    - iii. #3 fan (amps): 164 to 261.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** In lieu of installing a continuous monitoring system for measurement of opacity, observations of the opacity of the visible emissions (VEs) from the baghouses shall be performed by a certified VE observer as follows:
  - a. The VE observations from the baghouse serving this emissions unit shall be conducted in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - b. The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P902, P903 and P904) are operating in the melting and refining period.
  - c. The VEs shall be taken for at least three 6-minute periods. The opacities 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 the visible emissions, only one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause or location of visible emissions observed during a single incident.
  - d. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verify that their Method 9 certifications are up-to-date.
- 2.** The permittee shall check and record on a once-per-shift basis the furnace static pressure, in inches of water, and either: check and record the control system fan motor amperes and damper positions on a once-per-shift basis; install, calibrate, operate 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 and check and record damper positions on a once-per-shift basis. The monitoring devices may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of +/-10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The permittee may be required to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of appendix A of 40 CFR Part 60.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. When the permittee is required to demonstrate compliance with the VE limitation in section A.I.2.d.iii. and at any other time, the Director (the appropriate Ohio EPA District Office or local air agency) may require that either the control system fan motor amperes and all damper positions, or the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions.

The permittee may petition the Director for reestablishment of these parameters whenever the permittee can demonstrate to 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 levels for each applicable period. Operation at other than baseline values will be considered by the Director (the appropriate Ohio EPA District Office or local air agency) to be unacceptable operation and maintenance of the control system.

4. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). These inspections 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 recorded and proper maintenance performed. The permittee may petition the Director (the appropriate Ohio EPA District Office or local air agency) to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.
5. The permittee shall calibrate, operate and maintain monitoring devices that allow the pressure in the free space inside the EAF to be monitored. The monitoring devices may be installed in any appropriate location in the EAF's ducts prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring devices shall have an accuracy of +/-5 mm of water gauge over their normal operating range and shall be calibrated according to the manufacturer's instructions.
6. Except as provided for in section A.III.7, when the permittee of an EAF controlled by a direct-shell evacuation control (DEC) system is required to demonstrate compliance with the VE limitation in section A.I.2.d.iii, and at any other time the Director (the appropriate Ohio EPA District Office or local air agency) may require, the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required pursuant to section A.III.5 above. The permittee may petition the Director (the appropriate Ohio EPA District Office or local air agency) for reestablishment of the pressure whenever the permittee can demonstrate to the the Director's (the appropriate Ohio EPA District Office's or local air agency'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 Director (the appropriate Ohio EPA District Office or local air agency) to be unacceptable operation and maintenance of the affected facility.

Based upon the most recent demonstration of compliance, both the maximum pressure (i.e., the pressure shall not be any more positive) in the free space inside the EAF and the control systems fan motor amperes range, when the EAF was operating in the meltdown and refining periods, are identified below:

- a. static pressure : + 0.0981inch of water; and
- b. fan motor amperes ranges:
  - i. #1 fan (amps): 173 to 265;
  - ii. #2 fan (amps): 157 to 265; and
  - iii. #3 fan (amps): 164 to 261.

### III. Monitoring and/or Record Keeping Requirements (continued)

7. 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 must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

The permittee shall maintain daily records of all shop opacity observations.

8. The permittee shall calculate and maintain each month the following information for emissions units P902 and P903, combined.
- a. the number of melts that occurred;
  - b. the type of steel produced in each melt (carbon and/or stainless steel);
  - c. the tons of steel produced in each melt;
  - d. the total tons of each type of steel produced;
  - e. the total CO emissions, in tons, calculated as follows:
    - i. for stainless steel, multiply the amount of stainless steel produced, in tons (from section 8.d.) by the emission factor of 1.3 lbs CO/ton of steel produced\*, and then divide by 2000;
    - ii. for carbon steel, multiply the amount of carbon steel produced, in tons (from section 8.d.) by the emission factor of 1.7 lbs CO/ton of steel produced\*, and then divide by 2000; and
    - iii. add e.i. + e.ii.
- \* based upon the results of the most recent emission testing conducted for this emissions unit
- f. the total NOx emissions, in tons, calculated as follows:
    - i. for stainless steel, multiply the amount of stainless steel produced, in tons (from section 8.d.) by the emission factor of 0.66 lb NOx/ton of steel produced\*, and then divide by 2000;
    - ii. for carbon steel, multiply the amount of carbon steel produced, in tons (from section 8.d.) by the emission factor of 0.43 lb NOx/ton of steel produced\*, and then divide by 2000; and
    - iii. add f.i. + f.ii.
- \* based on the results of the most recent emission testing conducted for this emissions unit
- g. the rolling, 12 month summation of the monthly CO emission rates, in tons; and
  - h. the rolling, 12-month summation of the monthly NOx emission rates; in tons.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which the opacity limitation for the baghouse was exceeded and (b) describe any corrective actions taken to eliminate the opacity exceedances. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the static pressures in the free space inside the furnace exceeded the values in section A.II.1 of this permit;
  - b. all periods of time during which any of the control system fan motor ampere values were outside the ranges in section A.II.1 of this permit; and
  - c. all periods of time during which the hoods and/or the baghouse were operated at volumetric flow rates lower than those established in section A.III.3 of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the shop opacity observations were in excess of the limit specified in section A.I.2.d.iii of this permit.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the limitations (for emissions units P902 and P903, combined) of 901.1 tons of CO/rolling, 12-month period and 394.1 tons of NOx/rolling, 12-month period.
5. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

#### V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Hg, CO, PE, NOx and VOC. The permittee shall be deemed to be in compliance with the 12.3 lbs PE/hr and 0.0052 grain PE/dscf limitations for this emissions unit and the hourly and/or grain loading PE limitations for the other emissions units (i.e., P904 and P924) vented to this baghouse only if the testing pursuant to this term and condition shows a PE grain loading not exceeding 0.0052 grain per dry standard cubic foot of exhaust gases.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. Hg: Method 29 of 40 CFR, Part 60, Appendix A;
    - ii. PE: Method 5D of 40 CFR, Part 60, Appendix A;
    - iii. NOx: Method 7 of 40 CFR Part, 60, Appendix A;
    - iv. CO: Method 10 of 40 CFR, Part 60, Appendix A; and
    - v. VOC: Methods 18, 25, or 25A of 40 CFR, Part 60, Appendix A.
  - d. The test(s) for PE shall be conducted while emissions units P903, P904 and P924 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - e. The tests for Hg, NOx, CO and VOC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. The tests may be conducted on the gas stream exiting this emissions unit or at the inlet to the baghouse before it combines with the gas streams from the other emissions unit.

## V. Testing Requirements (continued)

\* Testing for Hg emissions shall be performed while melting the maximum amount possible of no. 2 bundles and frag scrap.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. The written report described in section A.V.1. above, for the results of the PE testing, shall also include the following information:
  - a. facility name and address;
  - b. plant representative;
  - c. make and model of process, control device, and continuous monitoring equipment;
  - d. flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
  - e. rated (design) capacity of process equipment;
  - f. list of charge and tap weights and materials;
  - g. heat times, including start and stop times and a log of process operation, including periods of no operation during testing and the pressure inside the EAF's direct shell evacuation control system;
  - h. control device operating log;
  - i. reference Method 9 data;
  - j. test dates and test times;
  - k. test company;
  - l. test company representative;
  - m. test observers from outside agency;
  - n. description of test methodology used, including any deviation from standard reference methods;
  - o. schematic of sampling location;
  - p. number of sampling points;
  - q. description of sampling equipment;
  - r. listing of sampling equipment calibrations and procedures;
  - s. field and laboratory data sheets;
  - t. description of sample recovery procedures;
  - u. sampling equipment leak check results;
  - v. description of quality assurance procedures;
  - w. notation of sample blank corrections; and
  - x. sample emission calculations.

## V. Testing Requirements (continued)

3. During the emission testing required in section A.V.1., the permittee shall also perform the following:
- a. 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;
  - b. obtain and record the information required in sections A.III.3, A.III.6 and A.III.7; and
  - c. record the following information for all heats covered by the emission testing:
    - i. the charge weights and materials, and tap weights and materials; and
    - ii. the heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside during testing and the pressure inside during testing and the pressure inside.
4. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
- 4.a** Emission Limitations:  
16.08 lbs of PE/hr and 70.4 tons of PE/yr
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of this permit.
- Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).
- 4.b** Emission Limitation:  
901.1 tons CO/rolling, 12-month period (for emissions units P902 and P903, combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the emission limitation above through the record keeping requirements specified in section A.III.8 of this permit.
- 4.c** Emission Limitation:  
394.1 tons NOx/rolling, 12-month period (for emissions units P902 and P903, combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the annual emission limitation above through the record keeping requirements specified in section A.III.8 of this permit.

## V. Testing Requirements (continued)

**4.d** Emission Limitation:  
19.8 tons fugitive PE/yr

Applicable Compliance Method:

The permittee may determine compliance with the annual fugitive PE limitation as follows:

i. multiply the maximum annual production rate (tons/yr) by the emission factor of 1.4 lbs fugitive PE/ton [for charging, tapping and slagging, from AP-42, Table 7.5-1(revised 10/86)], and then multiply by a control factor of  $(1-.98)^*$ ;

ii. multiply the maximum annual production rate (tons/yr) by an emission factor of 0.12 lb fugitive PE/ton [for Metallic Mineral Processing, Material Handling and Transfer, from AP-42, Table 8.23-1(revised 8/82)], and then multiply by a control factor of  $(1-0.9)^{**}$ ; and

iii. add d.i + d.ii.

\* The capture efficiency supplied by the company is estimated to be 98%.

\*\* The capture efficiency supplied by the company is estimated to be 90%.

**4.e** Emission Limitation:  
49.2 lbs of NO<sub>x</sub>/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**4.f** Emission Limitations:  
1.9 lbs of SO<sub>2</sub>/hr and 8.4 tons of SO<sub>2</sub>/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor from section A.VI.1 of this permit.

If required, the permittee shall demonstrate compliance with the hourly SO<sub>2</sub> emission limitation in accordance with 40 CFR, Part 60, Appendix A, Method 6.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

**4.g** Emission Limitations:  
17.1 lbs of VOC/hr and 75.2 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25 or 25A.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly emission limitation by 8760 and then dividing by 2000).

## V. Testing Requirements (continued)

- 4.h** Emission Limitations:  
0.008 lb of Pb/hr and 0.04 ton of Pb/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor from section A.VI.1 of this permit.

If required, the permittee shall demonstrate compliance with the hourly Pb emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 29.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 4.i** Emission Limitations:  
0.0009 lb of Hg/hr and 0.004 ton of Hg/yr

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of this permit.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 4.j** Emission Limitations:  
0.07 lb of F/hr and 0.32 ton of F/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor identified in section A.VI.1 of this permit.

If required, the permittee shall demonstrate compliance with the hourly FI emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 13.

Compliance with annual emission limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 4.k** Emission Limitation:  
12 mg/dscm (0.0052 gr/dscf) from the baghouse

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 5.

- 4.l** Emission Limitation:  
3 percent opacity, as a 6-minute average (from the baghouse)

**Applicable Compliance Method:**

If required, the permittee shall determine compliance with the opacity restriction above in accordance with 40 CFR, Part 60, Appendix A, Method 9.

## V. Testing Requirements (continued)

- 4.m** Emission Limitation:  
6 percent opacity, as a 6-minute average (from a shop and, due solely to the operations of any affected EAF vessel(s))

Applicable Compliance Method:

If required, the permittee shall determine compliance with the opacity restriction above in accordance with 40 CFR, Part 60, Appendix A, Method 9.

- 4.n** Emission Limitation:  
10 percent opacity, as a 6-minute average (from the dust handling system)

Applicable Compliance Method:

If required, the permittee shall determine compliance with the opacity restriction above in accordance with 40 CFR, Part 60, Appendix A, Method 9.

- 4.o** Emission Limitation:  
112.6 lbs of CO/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10. The permittee may also demonstrate compliance with the hourly emission limitation above by multiplying the maximum process weight rate (51.8 tons/hr) by the appropriate emission factor from section A.VI.1 of this permit.

## VI. Miscellaneous Requirements

1. The following emission factors were derived from the results of emission testing conducted at this facility, from 1995 through 1997, during the production of both carbon and stainless steel. These emission factors are based on the highest emission rate obtained for each pollutant during testing for both carbon and stainless steel (the emission factors below shall continually be updated based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance):

carbon steel -

CO: 1.7 lbs/ton  
NOx: 0.43 lb/ton  
VOC: 0.16 lb/ton  
SO<sub>2</sub>: 0.009 lb/ton  
lead: 0.00004 lb/ton  
mercury: 0.00002 lb/ton  
fluoride: 0.0009 lb/ton

stainless steel-

CO: 1.3 lbs/ton  
NOx: 0.66 lb/ton  
VOC: 0.23 lb/ton  
SO<sub>2</sub>: 0.03 lb/ton  
lead: 0.0001 lb/ton  
mercury: 0.00001 lb/ton  
fluoride: 0.0004 lb/ton

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ladle Metallurgical Furnace (P904)  
**Activity Description:** Ladle Metallurgical Furnace

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle metallurgical furnace, with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08	See A.I.2.a.
	OAC rule 3745-17-07(B)(1)	Visible PE shall not exceed 20% opacity, as a 3-minute average, except as provided by the rule.
	OAC rule 3745-31-05(3) (PTI 03-7519)	0.48 lb of PE/hr [from the baghouse serving this emissions unit]
		2.10 tons per year of PE [from the baghouse serving this emissions unit]
		0.36 lb/hr of PM10 [from the baghouse serving this emissions unit]
	1.5 tons per year of PM10 [from the baghouse serving this emissions unit]	
	The requirements of this rule also include the requirements of OAC rules 3745-17-07(A), 3745-17-07(B)(1) and 3745-17-08.	

## 2. Additional Terms and Conditions

- 2.a** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the use of localized hooding over the emissions unit, and venting of the particulate emissions to the baghouse.

The collection efficiency of the localized hooding shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

The baghouse employed shall achieve an outlet emission rate of not greater than 0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases. The baghouse controlling this emissions unit also serves as control equipment for emissions units P903 and P924 and is subject to an outlet grain loading limitation of 0.0052 gr/dscf and an opacity limitation of 3%, pursuant to 40 CFR, Part 60, Subpart AAa.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall conduct visible emissions (VE) observations for the baghouse serving this emissions unit in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
2. The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P902, P903 and P904) are operating in the melting and refining period.
3. The VEs shall be taken for at least three 6-minute periods. The opacities 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 the visible emissions, only one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause or location of visible emissions observed during a single incident.
4. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verify that their Method 9 certifications are up-to-date.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any building openings housing this emissions unit. These building openings shall include, but not limited to, doorways, windows, and roof monitors. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

## IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which the opacity limitation for the baghouse was exceeded and (b) describe any corrective actions taken to eliminate the opacity exceedances. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from any building openings housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
20 percent opacity, as a six-minute average, except as provided by rule  
  
Applicable Compliance Method:  
If required, compliance with the VE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).
  - 1.b Emission Limitations:  
0.48 lb of PE/hr and 2.10 tons per year of PE [from the baghouse stack serving this emissions unit]  
  
Applicable Compliance Method:  
The permittee shall be deemed to be in compliance with the hourly limitation for this emissions unit if the results of the emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P903 shows a PE grain loading not exceeding 0.0052 grain per dry standard cubic foot of exhaust gases.  
  
If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.  
  
Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).
  - 1.c Emission Limitations:  
0.36 lb of PM10/hr and 1.5 tons per year of PM10 [from the baghouse stack serving this emissions unit]  
  
Applicable Compliance Method:  
The permittee shall be deemed to be in compliance with the hourly limitation for this emissions unit if the results of the emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P903 shows a PE grain loading not exceeding 0.0052 grain per dry standard cubic foot of exhaust gases.  
  
If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A (including back half and size distribution) or Methods 201 or 201A.  
  
Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).
  - 1.d Emission Limitation:  
20 percent opacity, as a three-minute average, except as provided by rule  
  
Applicable Compliance Method:  
If required, compliance with the VE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(3).
  - 1.e Emission Limitation:  
0.0052 gr/dscf (from the baghouse)  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P903.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** AOD Vessel and Preheater (P924)  
**Activity Description:** Argon-Oxygen Decarborization Vessel and Preheater

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
argon oxygen decarbonization vessel and preheater, with baghouse	OAC rule 3745-17-11	50.0 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-08	See A.I.2.a.
	OAC rule 3745-17-07(B)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average, except as provided by the rule.

##### 2. Additional Terms and Conditions

- 2.a The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the use of localized hooding over the emissions unit, and venting of the particulate emissions to the baghouse.

The collection efficiency of the localized hooding shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

The control equipment employed shall achieve an outlet emission rate of not greater than 0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases. The baghouse controlling this emissions unit also serves as control equipment for emissions units P903 and P904 and is subject to an outlet grain loading limitation of 0.0052 gr/dscf and an opacity limitation of 3%, pursuant to 40 CFR, Part 60, Subpart AAa.

##### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall conduct visible emission (VE) observations for the baghouse serving this emissions unit in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
2. The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P902, P903 and P904) are operating in the melting and refining period.
3. The VEs shall be taken for at least three 6-minute periods. The opacities 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 the visible emissions, only one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause or location of visible emissions observed during a single incident.
4. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verify that their Method 9 certifications are up-to-date.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any building openings housing this emissions unit. These building openings shall include, but not limited to, doorways, windows, and roof monitors. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which the opacity limitation for the baghouse was exceeded and (b) describe any corrective actions taken to eliminate the opacity exceedances. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from any building openings housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
50.0 lbs of PE/hr

#### Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P903.

If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

## **V. Testing Requirements (continued)**

**1.b** Emission Limitation:  
20 percent opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance with the VE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

**1.c** Emission Limitation:  
20 percent opacity, as a three-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance with the VE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(3).

**1.d** Emission Limitation:  
0.0052 gr/dscf (from the baghouse)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with the methods and procedures outlined in section V.1 of the terms and conditions of the permit for emissions unit P903.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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