State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

07/22/03

RE: Proposed Title V Chapter 3745-77 Permit
03-70-01-0023 AK Steel Corporation

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for AK Steel Corporation, has been created in Ohio EPA's State Air Resources System (STARS) on 07/22/03, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northwest District Office
File, DAPC PMU

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 07/22/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 03-70-01-0023 to:
AK Steel Corporation
913 Bowman Street
Mansfield, OH 44901

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.

P009 (Hot Strip Mill)
Hot Strip Rolling

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 3745-77-08(E) 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

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii)

pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) ,(ii) and (iii))

(b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))

iii. **For monitoring, record keeping, and reporting requirements:**
Written reports that identify any deviations from the federally enforceable monitoring, record keeping, 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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, record keeping, 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.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

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 of any emissions unit(s) 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 OAC rule 3745-15-06, 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).
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

1. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

2. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

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.
(Authority for term: OAC rule 3745-77-07(A)(5))

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.
(Authority for term: OAC rule 3745-77-07(A)(6))

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, in accordance with A.10 below. 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.

(Authority for term: OAC rule 3745-77-07(A)(7))

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.

(Authority for term: OAC rule 3745-77-07(A)(8))

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.

(Authority for term: OAC rule 3745-77-07(A)(9))

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.

(Authority for term: OAC rule 3745-77-07(A)(10))

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 (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is

later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 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.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

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.

(Authority for term: OAC rule 3745-77-07(B))

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 Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA 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.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

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.

(Authority for term: OAC rule 3745-77-07(F))

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).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

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.

(Authority for term: OAC rule 3745-77-07(G))

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 of the U.S. EPA, 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.

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 purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.) *(Authority for term: OAC rule 3745-77-07(I))*

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.
(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

19. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

2. 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.

3. 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.

4. 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).

5. 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.

6. 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

1. Emissions units P011 (#2 Pickle Line Shot Blast), P013 (#2 Pickle Line) and P015 (Tandem Mill) have not been operated during the last two years. Before these emissions units are granted authorization to operate, the permittee shall comply with all applicable federal and Ohio EPA new source review requirements and federal New Source Performance Standards, and demonstrate compliance with all applicable emission limitations and control requirements by performing emission tests in accordance with U.S. EPA-approved methods and procedures.

B. State Only Enforceable Section

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

P025 EAF Lime Storage Bins
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
Z003 #3 Ladle Preheater
Z004 #4 Ladle Preheater
Z016 Cold Solvent Cleaners
Z030 #0 Ladle Preheater
Z032 60 Hp Emergency Electical Water Pump
Z033 1675 Hp Emergency Electrical Generator

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
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 SO2/mmBtu of actual heat input
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.
	OAC rule 3745-31-05(A)(3) PTI 03-069	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-18-06(D), 3745-17-10(B), 3745-23-06(B) and 3745-21-08(B).

2. Additional Terms and Conditions

2.a The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 03-069.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or no. 2 fuel oil in this emissions unit.

2. The quality of oil burned in this emissions unit shall meet a sulfur content that 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

1. 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.

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.

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 Ohio EPA, Northwest District Office in writing of any record showing a deviation of the allowable sulfur dioxide emission limitation, as shown by the calculated sulfur dioxide emission rates from section A.III.2 above. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office 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, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received meets the limitation.

When firing #2 fuel oil, compliance with the allowable sulfur dioxide emission limitation may also be determined by multiplying the emission factor of 142(S) lb SO2/1000 gallon of oil used, from AP-42, Table 1.3-1 (revised 9/98), by the maximum number of gallons burned, and then dividing by the maximum heat input capacity of the boiler (82 mmBtu/hr).

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 Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

* S = the maximum percentage of sulfur (S), by weight, in the #2 fuel oil. If, for example, the maximum sulfur percent is 1%, then S = 1

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
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 SO2/mmBtu of actual heat input
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.
	OAC rule 3745-31-05(A)(3) PTI 03-069	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-18-06(D), 3745-17-10(B), 3745-23-06(B) and 3745-21-08(B).

2. Additional Terms and Conditions

2.a The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 03-069.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or no. 2 fuel oil in this emissions unit.

II. Operational Restrictions (continued)

2. The quality of oil burned in this emissions unit shall meet a sulfur content that 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

1. 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.

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.

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 Ohio EPA, Northwest District Office in writing of any record showing a deviation of the allowable sulfur dioxide emission limitation, as shown by the calculated sulfur dioxide emission rates from section A.III.2 above. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office 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).

V. Testing Requirements (continued)

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).

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

Applicable Compliance Method:
When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received meets the limitation.

When firing #2 fuel oil, compliance with the allowable sulfur dioxide emission limitation may also be determined by multiplying the emission factor of 142(S) lb SO2/1000 gallon of oil used, from AP-42, Table 1.3-1 (revised 9/98), by the maximum number of gallons burned, and then dividing by the maximum heat input capacity of the boiler (82 mmBtu/hr).

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 Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

* S = the maximum percentage of sulfur (S), by weight, in the #2 fuel oil. If, for example, the maximum sulfur percent is 1%, then S = 1

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
paved roadways and parking areas (see Section A.I.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.I.2.c, A.I.2.d, and A.I.2.f through A.I.2.j)
unpaved roadways and parking areas (see Section A.I.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 with identifications and approximate one way mileage.

Steel Making Roads:
Melt Shop 0.4
Hot Strip Mill 0.1
Coil Yard Road 0.2
Caster 0.3
Ladle Reline 0.2

South Plant and Central Shops:
Entry Lane 0.2
Cold Strip Mill 0.35
Main Road 0.6
Central Shops Loop 0.5

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 with identifications and approximate one way mileage.

Slag and Gravel Areas:
Central Shops 0.1
Melt Shop 0.2
Hot Strip Mill 0.15
Coil Yard 0.2
Ladle Reline 0.3

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. Additional Terms and Conditions (continued)

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

III. Monitoring and/or Record Keeping Requirements

1.a Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas	minimum inspection frequency
south plant and central shops roads	weekly
steel making roads	daily

unpaved roadways and parking areas	minimum inspection frequency
slag and gravel areas	daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a 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. Any required inspection that is not performed due to any of the above-identified events shall be performed at the next scheduled frequency.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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

4. The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Hot Strip Mill (P009)

Activity Description: Hot Strip Rolling

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
hot strip mill	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 3-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)	See A.I.2.a.

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 a building enclosure.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) 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: Visible PE shall not exceed 20% opacity, as a 3-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)(3).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
thin slab continuous caster, equipped with a 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

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from 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 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 that (a) identify all days during which any visible particulate emissions were observed from 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 Ohio EPA, Northwest District Office) 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: 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 Limitations:
1.13 lbs PE/hr and 4.95 tons PE/yr

Applicable compliance method:
The permittee shall demonstrate compliance with with the hourly allowable PE 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 also determine compliancewith the hourly allowable 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 hourly allowable PM10 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 also determine compliance with the hourly allowable PM10 emission 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 PE 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 Ohio EPA, Northwest District Office.

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 Ohio EPA, Northwest District Office. 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, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
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 The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-08(B), 374-23-06(B) and 3745-18-06(E).
	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(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 rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.
	OAC rule 3745-18-06(E)	none, exempt pursuant to OAC rule 3745-18-06(C) (see A.I.2.b)

2. Additional Terms and Conditions

2.a The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 03-7606.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

1. 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.

2. The permittee shall perform weekly checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from 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 any 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 that (a) identify all days during which any visible particulate emissions were observed from 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 Ohio EPA, Northwest District Office) 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 NOx shall be conducted within 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing for CO, PE and PM10 shall be conducted within 6 months after issuance of the permit

c. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, PE and PM10.

d. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. NOx: Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A;

ii. PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A;

iii. CO: Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A; and

iv. 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.

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 Ohio EPA, Northwest District Office.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. 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, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office.

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).

V. Testing Requirements (continued)

3.b Emission Limitation:
12.02 lbs NOx/hr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable NOx emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

3.c Emission Limitation:
2.53 lbs CO/hr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable CO emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 10.

3.d Emission Limitation:
1.27 lbs PE/hr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable PE 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 PM10/hr

Applicable Compliance Method: .
The permittee shall demonstrate compliance with the hourly allowable PM10 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#8 electric arc furnace, 125-ton holding capacity, equipped with a baghouse (no. 8 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 oxides (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 (SO2)/hr [from the baghouse serving this emissions unit]

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		7.0 tons SO2/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.I.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 SO2 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. Additional Terms and Conditions (continued)

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.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.

2.h The permittee does not currently melt No. 2 bundles in this emissions unit and has no present intention of doing so.

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. the maximum furnace static pressure established during the most recent emission testing that demonstrated the emissions unit was in compliance; and

b. plus or minus fifteen percent of the fan motor amps value established during the most recent emission testing that demonstrated the emissions unit was in compliance.

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, P904 and P924) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) for reestablishment of the pressure whenever the permittee can demonstrate to the the Director's (the Ohio EPA, Northwest District Office'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 Ohio EPA, Northwest District Office) to be unacceptable operation and maintenance of the affected facility.

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.

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

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 that (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 Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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.

IV. Reporting Requirements (continued)

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 the following:

a. all exceedances of the rolling, 12-month CO emission limitation of of 901.1 tons (for emissions units P902 and P903, combined); and

b. all excedances of the rolling, 12-month NOx emission limitation of 394.1 tons (for emissions units P902 and P903, combined).

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 6 months after issuance of this permit, unless emissions testing was conducted within the previous 12 months, 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: Methods 1 - 4 and 7 of 40 CFR Part, 60, Appendix A;
iv. CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A; and
v. VOC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

d. The test(s) for PE shall be conducted while emissions units P902, P904 and P924 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.

V. Testing Requirements (continued)

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 Ohio EPA, Northwest District Office. 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

* Testing for Hg emissions shall be performed while melting the maximum amount of frag scrap as allowed by AK Steel's scrap specifications.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. 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, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office.

V. Testing Requirements (continued)

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. those data required under 40 CFR Part 60.274a(h) of subpart AAa:
i. list of charge and tap weights and materials;
ii. heat times and process log;
iii. control device operation log;
iv. continuous monitor or Reference Method 9 data; and
v. furnace static pressure;
g. test dates and test times;
h. test company;
i. test company representative;
j. test observers from outside agency;
k. description of test methodology used, including any deviation from standard reference methods;
l. schematic of sampling location;
m. number of sampling points;
n. description of sampling equipment;
o. listing of sampling equipment calibrations and procedures;
p. field and laboratory data sheets;
q. description of sample recovery procedures;
r. sampling equipment leak check results;
s. description of quality assurance procedures;
t. description of analytical procedures;
u. notation of sample blank corrections;
v. sample emission calculations;
w. control system fan motor amps; and
x. the volumetric flow rate of each seperately ducted hood.

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):

V. Testing Requirements (continued)

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 allowable PE 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 multipling 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 annual alowable CO 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 allowable NOx emission limitation above through the record keeping requirements specified in section A.III.8 of this permit.

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

Applicable Compliance Method:
The permittee may determine compliance with the annual allowable 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 allowable NOx emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

V. Testing Requirements (continued)

4.f Emission Limitations:
1.6 lbs of SO2/hr and 7.0 tons of SO2/yr

Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly allowable SO2 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 SO2 emission limitation in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 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 allowable VOC 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).

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 allowable Pb 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 allowable Hg 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).

V. Testing Requirements (continued)

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 allowable F 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 allowable F 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 PE/dscm (0.0052 gr PE/dscf), from the baghouse

Applicable Compliance Method:
The permittee shall demonstrate compliance with the allowable PE 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.

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 allowable CO emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 10.

The permittee may also demonstrate compliance with the hourly allowable CO 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
SO2: 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
SO2: 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#9 electric arc furnace, 150-ton holding capacity, equipped with a 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 oxides (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]

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		8.4 tons SO2/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 F/yr [from the baghouse serving this emissions unit]
	40 CFR 60, Subpart AAa	See A.I.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 SO2 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. Additional Terms and Conditions (continued)

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.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.

2.h The permittee does not currently melt No. 2 bundles in this emissions unit and has no present intention of doing so.

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. the maximum furnace static pressure established during the most recent emission testing that demonstrated the emissions unit was in compliance; and

b. plus or minus fifteen percent of the fan motor amps value established during the most recent emission testing that demonstrated the emissions unit was in compliance.

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 this emissions unit is 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) 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 Ohio EPA, Northwest District Office) for reestablishment of the pressure whenever the permittee can demonstrate to the the Director's (the Ohio EPA, Northwest District Office'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 Ohio EPA, Northwest District Office) to be unacceptable operation and maintenance of the affected facility.

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.

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

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 that (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 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.

IV. Reporting Requirements (continued)

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 the following:

a. all exceedances of the rolling, 12-month CO emission limitation of of 901.1 tons (for emissions units P902 and P903, combined); and

b. all excedances of the rolling, 12-month NOx emission limitation of 394.1 tons (for emissions units P902 and P903, combined).

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 6 months after issuance of this permit, unless emissions testing was conducted within the previous 12 months, 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 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: Methods 1 - 4 and 7 of 40 CFR Part, 60, Appendix A;
iv. CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A; and
v. VOC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

d. The test(s) for PE shall be conducted while this emissions unit is operated 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)

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 Ohio EPA, Northwest District Office. 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

* Testing for Hg emissions shall be performed while melting the maximum amount of frag scrap as allowed by AK Steel's scrap specifications.

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.

V. Testing Requirements (continued)

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. those data required under 40 CFR Part 60.274a(h) of subpart AAa:
i. list of charge and tap weights and materials;
ii. heat times and process log;
iii. control device operation log;
iv. continuous monitor or Reference Method 9 data; and
v. furnace static pressure;
g. test dates and test times;
h. test company;
i. test company representative;
j. test observers from outside agency;
k. description of test methodology used, including any deviation from standard reference methods;
l. schematic of sampling location;
m. number of sampling points;
n. description of sampling equipment;
o. listing of sampling equipment calibrations and procedures;
p. field and laboratory data sheets;
q. description of sample recovery procedures;
r. sampling equipment leak check results;
s. description of quality assurance procedures;
t. description of analytical procedures;
u. notation of sample blank corrections;
v. sample emission calculations;
w. control system fan motor amps; and
x. the volumetric flow rate of each seperately ducted hood.

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):

V. Testing Requirements (continued)

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 allowable PE 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 multipling 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 annual allowable CO 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 allowable NOx emission limitation above through the record keeping requirements specified in section A.III.8 of this permit.

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

Applicable Compliance Method:
The permittee may determine compliance with the annual allowable 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 NOx/hr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable NOx emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

V. Testing Requirements (continued)

4.f Emission Limitations:
1.9 lbs of SO2/hr and 8.4 tons of SO2/yr

Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly allowable SO2 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 SO2 emission limitation in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 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 allowable VOC 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).

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 allowable Pb 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 allowable Hg 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).

V. Testing Requirements (continued)

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 allowable F 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 allowable F 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 PE/dscm (0.0052 gr PE/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.

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 allowable CO emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 10.

The permittee may also demonstrate compliance with the hourly allowable CO 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
SO2: 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
SO2: 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
ladle metallurgical furnace, equipped with a baghouse (no. 8 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 3745-17-08(B)	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 P902 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, P904 and P924) 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.

6. Notwithstanding the frequency of the monitoring and record keeping requirements specified in section A.III.5, the permittee may reduce the frequency of visual observations specified in A.III.5. from daily checks to weekly if the following conditions are met:

a. for 1 full quarter the facility's visual observations indicate no visible emissions; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.5.

The permittee shall revert to daily checks if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (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 Ohio EPA, Northwest District Office) 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 that (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 Ohio EPA, Northwest District Office) 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:
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 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).

V. Testing Requirements (continued)

1.d Emission Limitation:
Visible PE shall not exceed 20% 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 PE/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 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
argon-oxygen decarbonization vessel and preheater, equipped with a baghouse (no. 8 baghouse)	OAC rule 3745-17-08	See A.I.2.d.
	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.e.
	40 CFR, Part 60, Subpart AAa	See A.I.2.b and c.

2. Additional Terms and Conditions

2.a The VE limitation specified by this rule is less stringent than the VE limitation established pursuant to 40 CFR, Subpart AAa.

2.b The permittee shall not cause to be discharged into the atmosphere gases from the argon-oxygen decarburization vessel (AOD) 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.c 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.d The RACM requirements specified by this rule are less stringent than the control measures/requirements established pursuant to 40 CFR 60, Subpart AAa.

2.e The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to 40 CFR, Subpart AAa.

II. Operational Restrictions

None

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, P904 and P924) 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 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 Ohio EPA, Northwest District Office) to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emissions capture system.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (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 Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. 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.b.iii of this permit.

3. 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 6 months after issuance of this permit, unless emissions testing was conducted within the previous 12 months, 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 PE. The permittee shall be deemed to be in compliance with the 0.0052 grain PE/dscf limitation for this emissions unit and the hourly and/or grain loading PE limitations for the other emissions units (i.e., P902 and P904) 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. PE: Method 5D of 40 CFR, Part 60, Appendix A;

d. The test(s) for PE shall be conducted while emissions units P902, P904 and P924 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. 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, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office.

V. Testing Requirements (continued)

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.

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. 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 Limitation:
12 mg PE/dscm (0.0052 gr PE/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.

V. Testing Requirements (continued)

4.b 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.

4.c 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.d 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.

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
SO2: 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
SO2: 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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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