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

08/28/02

RE: Proposed Title V Chapter 3745-77 Permit
03-26-00-0073
North Star BHP Steel L. L. C.

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 North Star BHP Steel L. L. C., has been created in Ohio EPA's State Air Resources System (STARS) on 08/28/02, for review by USEPA. This proposed action is identified in STARS as  covering the facility specific terms and conditions, and 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: 08/28/02	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: 03-26-00-0073 to:
North Star BHP Steel L. L. C.
P.O. Box 128
Delta, OH 43515

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

F005 (Plant Roadways & Parking Areas)
Vehicle traffic and parking.

P001 (Tunnel Furnace 1)
Raises and equalizes the temperature of the steel slabs to a level suitable for hot rolling.

P002 (Heated Transfer Table)
Maintains the slab temperature for the finishing mill.

P003 (Finishing Mill)
Shapes semifinished steel plate into finished flat rolled product.

P004 (Ladle Preheat 1)
Maintains ladle refractory temperature.

P005 (Ladle Preheat 2)
Maintains ladle refractory temperature.

P006 (Ladle Preheat 3)
Maintains ladle refractory temperature.

P008 (Ladle Dryer 1)
Dries replacement "green" refractories prior to ladle usage.

P009 (Ladle Dryer 2)
Dries replacement "green" refractories prior to ladle usage.

P014 (Contact Cooling Towers
)
Cools recirculated contact water from hot processes.

P901 (Electric Arc Furnace)
An EAF melts steel scrap with electrodes in a batch operation. The melting cycle consists of three phases: scrap preparation and charging, scrap meltdown, and molten steel tapping.

P902 (Ladle Metallurgy Facility 1)
Refines molten steel from the electric arc furnace.

P903 (Ladle Metallurgy Facility 2)
Refines molten steel from the electric arc furnace.

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. **For emission limitations, operational restrictions, and control device operating parameter limitations:**

(a) Written reports of (i) any deviations from federally enforceable 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 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 the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.
(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 <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

Tundish Preheat 1 (P010);
Tundish Preheat 2 (P011);
Tundish Dryer 1, (P012);
Caster (P904);
Baghouse Dust Handling (F001);
Storage Silos East (F002);
Storage Silos West (F003);
Ladle Temp and Al Station (Z001);
Liquid Steel Decanting (Z002);
Ladle Rebuild Area (Z003);
Tundish De-Skull Stand (Z004);
Caster Parts Washer (Z005);
EAF Parts Washer (Z006);
Roughing Mill Parts Washer (Z007);
Finishing Mill Parts Washer (Z008);
Downcoiler Parts Washer (Z009);
Roll Shop Parts Washer (Z010);
Central Maintenance Parts Washer (Z011);
Caster Space Heater (Z012);
Finishing Mill Space Heater (Z013);
Roll Shop Space Heater (Z014);
Warehouse Space Heater (Z015);
Roughing Mill Space Heater (Z016);
Central Maint Space Heater (Z017); and
Finished Coil Marking (Z018).

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 PTI for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Plant Roadways & Parking Areas (F005)

Activity Description: Vehicle traffic and parking.

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, parking and storage areas (See Section A.I.2.c.)	OAC rule 3745-17-07(B)	none (See A.I.2.a.)
	OAC rule 3745-17-08(B)	none (See A.I.2.b.)
	OAC rule 3745-31-05 (PTI 03-9212)	no visible particulate emissions (PE) except for one minute during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Sections A.2.e, and A.2.g through A.2.k)
unpaved roadways and storage areas (See Section A.I.2.d.)	OAC rule 3745-17-07(B)	none (See A.I.2.a.)
	OAC rule 3745-17-08(B)	none (See A.I.2.b.)
	OAC rule 3745-31-05 (PTI 03-9212)	no visible particulate emissions except for 3 minutes during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.f through A.2.k)
plant roadways and parking areas	OAC rule 3745-17-07(B)	none (See A.I.2.a.)
	OAC rule 3745-17-08(B)	none (See A.I.2.b.)
	OAC rule 3745-31-05 (PTI 03-9212)	213.8 lbs PE/day (average)(See A.I.2.l.) 42.8 lbs PM10/day(average)(See A.I.2.l.)

2. Additional Terms and Conditions

2.a This emission unit is exempt from the visible PE limitation specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

2.b This facility is not located within an "Appendix A" area identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

2.c The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:
main site entrance road
employee entrance road
scrap and coil roads
warehouse, central maintenance and roll shop road
north - south connection road

paved parking/storage areas:
main parking lot
coil storage area
scrap storage area
building storage pads

2.d The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:
slag transport road
south service road

unpaved parking/storage areas:
north coil storage yard
south coil storage yard

2.e The permittee shall employ best available control measures on all paved roadways, parking and storage 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, parking and storage areas by flushing with water and/or 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.f The permittee shall employ best available control measures on all unpaved roadways and storage 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 with water and unpaved storage areas with water and/or dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.g 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.h 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.i The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved public streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.j 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.k Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

2.l The PE and PM10 emission limitations were established as average daily values [based on the annual vehicle miles traveled (VMT) (associated with the maximum production of 2.25 million tons of steel/yr) divided by 365 days]. It is also assumed that 20% of the PE are PM10.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #03-09212, issued on November 28, 2000: A.III.2., AIII.3., A.III.4., A.III.5. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

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

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

paved roadways:	minimum inspection frequency
main site entrance road	daily
employee entrance road	daily
scrap and coil roads	daily
warehouse, central maintenance and roll shop road	daily
north - south connection road	daily

paved parking/storage areas:	minimum inspection frequency
main parking lot	daily
coil storage area	daily
scrap storage area	daily
building storage pads	daily

unpaved roadways:	minimum inspection frequency
slag transport road	daily
south service road	daily

unpaved storage areas:	minimum inspection frequency
north coil storage yard	daily
south coil storage yard	daily

3. 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 as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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 5.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. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #03-9212, issued on April 30, 1999: A.IV.2, A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

2. 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.

3. 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. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #03-9212, issued on April 30, 1999: A.V.2. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

2. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.a Emission Limitation:

213.8 lbs PE/day (average)

Applicable Compliance Method:
The limitation of 213.8 lbs PE/day may be determined based on the emission factors for paved and unpaved roadways and parking areas utilizing AP-42, Section 13.2.1 (paved roads)(revised 1997) and section 13.2.2 (unpaved roads)(revised 1998) and the average daily VMT (maximum VMT/365).

2.b Emission Limitation:

42.8 lbs PM10/day

Applicable Compliance Method:

The limitation of 42.8 lbs PM10/day may be determined by multiplying the daily PE limitation by 0.2.*

* PM10 emissions are assumed to be 20% of the total PE.

2.c Emission Limitation:

No visible particulate emissions except for one minute during any 60-minute period

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.

V. Testing Requirements (continued)

2.d Emission Limitation:

No visible particulate emissions except for three minutes during any 60-minute period

Applicable Compliance Method:

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: Tunnel Furnace 1 (P001)

Activity Description: Raises and equalizes the temperature of the steel slabs to a level suitable for hot 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
natural gas-fired tunnel furnace #1 (113 mmBtu/hr), with low NOx burners	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 3745-17-11	See A.I.2.a.
	OAC rule 3745-18-06(E)	See A.I.2.a.
	OAC rule 3745-31-05 (PTI 03-9212)	1.13 lbs PE/hr 4.95 tons PE/yr 0.068 lb sulfur dioxide (SO2)/hr 0.30 ton SO2/yr 22.6 lbs nitrogen oxides (NOx)/hr 99.0 tons NOx/yr 7.91 lbs carbon monoxide (CO)/hr 34.7 tons CO/yr The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), 3745-17-07(A) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.b.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.b 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 03-9212.

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.

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.

V. Testing Requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx and CO.

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

NOx: Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A

CO: Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A

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

V. Testing Requirements (continued)

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

Personnel from the Director (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 Director (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 Director (the Ohio EPA, Northwest District Office).

2. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.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, the permittee shall demonstrate compliance with visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

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

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

2.c Emission Limitations: 22.6 lbs NOx/hr and 99.0 tons NOx/yr

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 Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

2.d Emission Limitations: 7.91 lbs CO/hr and 34.7 tons CO/yr

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 Methods 1 through 4 and 10 of 40, CFR Part 60, Appendix A.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.e Emission Limitations: 0.068 lb SO2/hr and 0.30 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Heated Transfer Table (P002)

Activity Description: Maintains the slab temperature for the finishing mill.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired heated transfer table (60 mmBtu/hr), with low NOx burners	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 3745-17-11	See A.I.2.a.
	OAC rule 3745-18-06(E)	See A.I.2.a
	OAC rule 3745-31-05 (PTI 03-9212)	0.6 lb PE/hr 2.63 tons PE/yr 0.036 lb sulfur dioxide (SO2)/hr 0.16 ton SO2/yr 9.0 lbs nitrogen oxides (NOx)/hr 39.5 tons NOx/yr 4.2 lbs carbon monoxide (CO)/hr 18.4 tons CO/yr The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.b 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 03-9212.

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.

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.

V. Testing Requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx and CO.

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

NOx: Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A

CO: Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Director (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 Director (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 Director (the Ohio EPA, Northwest District Office's) refusal to accept the results of the emission test(s).

Personnel from the Director (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 Director (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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

2. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.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, the permittee shall demonstrate compliance with visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

2.b Emission Limitations: 0.6 lb PE/hr and 2.63 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

2.c Emission Limitations: 9.0 lbs NOx/hr and 39.5 tons NOx/yr

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 Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.d Emission Limitations: 4.2 lbs CO/hr and 18.4 tons CO/yr

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 Methods 1 through 4 and 10 of 40, CFR Part 60, Appendix A.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

2.e Emission Limitations: 0.036 lb SO2/hr and 0.16 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Finishing Mill (P003)

Activity Description: Shapes semifinished steel plate into finished flat rolled product.

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
finishing mill	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 3745-17-11(B)	See A.I.2.a.
	OAC rule 3745-31-05 PTI 03-9212	2.2 lbs PE/hr 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 emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall not employ any rolling mill solution and/or oils in the finishing mill that result in organic compound emissions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from 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.

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

2. The permittee shall record and maintain each month the following information for this emissions unit:

a. the name or identification number of each rolling mill solution and oil employed;

b. the OC content, in lbs/gallon, and the boiling point, in degrees Fahrenheit, of each rolling mill solution and oil employed; and

c. whether or not each rolling mill solution or oil employed resulted in the emissions of organic compounds.

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.

2. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) of each month showing the use of rolling mill solution and/or oil in the finishing mill that resulted in organic compond emissions. The notification shall be submitted in writing and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the occurence.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation: 2.2 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the lbs PE/hr allowable limitation above by multiplying an emission factor based on vendor estimates of 10 milligrams/cu. meter by the maximum exhaust fume flow rate (cu. meters/hr), and then dividing by 454,100*.

* milligrams to pounds conversion factor

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.b 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, the permittee shall demonstrate compliance with the visible PE limitation pursuant to OAC rule 3745-17-03(B)(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: Ladle Preheat 1 (P004)

Activity Description: Maintains ladle refractory temperature.

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 preheater #1	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212)	0.06 lb PE/hr 0.26 ton PE/yr 0.012 lb sulfur dioxide (SO2)/hr 0.053 ton SO2/yr 2.0 lbs nitrogen oxides (NOx)/hr 8.76 tons NOx/yr 0.40 lb carbon monoxide (CO)/hr 1.75 tons CO/yr The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.d 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 03-9212.

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.

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.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitations: 2.0 lbs NOx/hr and 8.76 tons NOx/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NOx emission 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 100 lbs NOx/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations: 0.4 lb CO/hr and 1.75 tons CO/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable CO emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation in accordance with Methods 1 through 4 and 10, of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitations: 0.06 lb PE/hr and 0.26 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.d Emission Limitations: 0.012 lb SO2/hr and 0.053 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Ladle Preheat 2 (P005)

Activity Description: Maintains ladle refractory temperature.

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 preheater #2	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212)	0.06 lb PE/hr 0.26 ton PE/yr 0.012 lb sulfur dioxide (SO2)/hr 0.053 ton SO2/yr 2.0 lbs nitrogen oxides (NOx)/hr 8.76 tons NOx/yr 0.40 lb carbon monoxide (CO)/hr 1.75 tons CO/yr The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.d 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 03-9212.

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.

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.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitations: 2.0 lbs NOx/hr and 8.76 tons NOx/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NOx emission 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 100 lbs NOx/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations: 0.4 lb CO/hr and 1.75 tons CO/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable CO emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation in accordance with Methods 1 through 4 and 10, of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitations: 0.06 lb PE/hr and 0.26 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.d Emission Limitations: 0.012 lb SO2/hr and 0.053 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Ladle Preheat 3 (P006)

Activity Description: Maintains ladle refractory temperature.

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 preheater #3	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212)	0.05 lb PE/hr 0.21 ton PE/yr
		0.0096 lb sulfur dioxide (SO2)/hr 0.042 ton SO2/yr
		1.6 lbs nitrogen oxides (NOx)/hr 7.01 tons NOx/yr
		0.32 lb carbon monoxide (CO)/hr 1.4 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.d 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 03-9212.

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.

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.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitations: 1.6 lbs NOx/hr and 7.01 tons NOx/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NOx emission 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 100 lbs NOx/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations: 0.32 lb CO/hr and 1.4 tons CO/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable CO emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation in accordance with Methods 1 through 4 and 10, of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitations: 0.05 lb PE/hr and 0.21 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.d Emission Limitations: 0.0096 lb SO2/hr and 0.042 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Ladle Dryer 1 (P008)

Activity Description: Dries replacement "green" refractories prior to ladle usage.

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 dryer #1	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212)	0.05 lb PE/hr 0.21 ton PE/yr 0.0096 lb sulfur dioxide (SO2)/hr 0.042 ton SO2/yr 1.6 lbs nitrogen oxides (NOx)/hr 7.01 tons NOx/yr 0.32 lb carbon monoxide (CO)/hr 1.4 tons CO/yr The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.d 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 03-9212.

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.

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.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitations: 1.6 lbs NOx/hr and 7.01 tons NOx/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NOx emission 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 100 lbs NOx/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations: 0.32 lb CO/hr and 1.4 tons CO/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable CO emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation in accordance with Methods 1 through 4 and 10, of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitations: 0.05 lb PE/hr and 0.21 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.d Emission Limitations: 0.0096 lb SO2/hr and 0.042 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Ladle Dryer 2 (P009)

Activity Description: Dries replacement "green" refractories prior to ladle usage.

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 dryer #2	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212)	0.05 lb PE/hr 0.21 ton PE/yr
		0.0096 lb sulfur dioxide (SO2)/hr 0.042 ton SO2/yr
		1.6 lbs nitrogen oxides (NOx)/hr 7.01 tons NOx/yr
		0.32 lb carbon monoxide (CO)/hr 1.4 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

2.d 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 03-9212.

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.

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.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitations: 1.6 lbs NOx/hr and 7.01 tons NOx/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NOx emission 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 100 lbs NOx/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations: 0.32 lb CO/hr and 1.4 tons CO/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable CO emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mm cu.ft.

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation in accordance with Methods 1 through 4 and 10, of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitations: 0.05 lb PE/hr and 0.21 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lbs PE/hr limitation above by multiplying an emission factor based on vendor estimates of 10 lbs PE/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft./hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.d Emission Limitations: 0.0096 lb SO2/hr and 0.042 ton SO2/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with lb SO2/hr limitation above by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 0.6 lb SO2/mmcu.ft of natural gas by the emissions unit's maximum hourly natural gas consumption rate (mm cu.ft/hr).

The tons/yr emission limitation was developed by multiplying the pounds/hour limitation by 8760 and dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation by using test method Method 6, which are located in 40 CFR, Part 60, Appendix A.

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: Contact Cooling Towers (P014)

Activity Description: Cools recirculated contact water from hot processes.

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
contact cooling towers, with high efficiency mist eliminators	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 3745-17-11(B)	See A.I.2.a.
	OAC rule 3745-31-05 (PTI 03-9212)	2.91 lbs PE/hr 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 PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05.

2.b The permittee shall employ high efficiency mist eliminators to control all the PE from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the high efficiency mist eliminators associated with this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of 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 the high efficiency mist eliminators associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the 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 Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation: 2.91 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable PE limitation above by multiplying the emission factors contained in AP-42 [Chapter 13, Section 13.4 (revised 7/94) for Wet Cooling Towers] by the water circulation rate (in gallons per minute) from the meltshop, caster contact and noncontact, mill contact and noncontact, and laminar flow, and then multiplying by 60.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation by using test Methods 1 through 5, which are located in 40 CFR, Part 60, Appendix A.

1.b 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, the permittee shall demonstrate compliance with the visible PE limitation above pursuant to OAC rule 3745-17-03(B)(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: Electric Arc Furnace (P901)

Activity Description: An EAF melts steel scrap with electrodes in a batch operation. The melting cycle consists of three phases: scrap preparation and charging, scrap meltdown, and molten steel tapping.

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
electric arc furnace, with baghouse (315 tons/hr)	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-17-07(B)(1)	See A.I.2.h.
	OAC rule 3745-17-08(B)	See A.I.2.i.
	40 CFR, Part 60, Subpart AAa	See A.I.2.b. and A.I.2.d through A.I.2.g.
	OAC rule 3745-31-05 (PTI 03-9212)	8.8 lbs PE/hr* 31.5 tons/yr PE*
		6.7 lbs PM10/hr* 23.9 tons/yr PM10*
		31.5 lbs SO2/hr 112.5 tons/yr SO2
		170.1 lbs NOx/hr 607.5 tons/yr NOx
		2488.5 lbs CO/hr 8887.5 tons/yr CO
		110.3 lbs OC/hr 393.8 tons/yr OC
		0.18 lb Pb/hr* 0.63 ton tons/yr Pb*

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		0.022 lb Hg/hr* 0.17 ton/yr Hg*
		0.22 lb Mg/hr* 0.88 ton/yr Mg*
		0.32 lb Mn/hr* 1.16 tons/yr Mn*
		2.18 lb Zn/hr* 7.75 tons/yr Zn*
		0.0018 grain PE/dscf 15.6 lbs PE/hr 68.2 tons PE/yr (See A.I.2.j.)
		78.8 lbs SO2/hr 281.3 tons SO2 per rolling, 12-month period (See A.I.2.j.)
		179.6 lbsNOx/hr 641.3 tons NOx per rolling, 12-month period (See A.I.2.j.)
		2646.0 lbs CO/hr 9450.0 tons CO per rolling, 12-month peroid (See A.I.2.j.)

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		metal emissions from the baghouse serving emissions units P901, P902, and P903: 0.31 lb lead (Pb)/hr 1.36 tons Pb/yr 0.038 lb mercury (Hg)/hr 0.17 ton Hg/yr 0.44 lb magnesium (Mg)/hr 1.91 tons Mg/yr 0.58 lb manganese (Mn)/hr 2.52 tons Mn/yr 3.85 lb zinc (Zn)/hr 16.85 tons Zn/yr The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart AAa.

*fugitive emissions

2. Additional Terms and Conditions

2.a The opacity limitation specified by this rule is less stringent than the opacity limitation established pursuant to 40 CFR, Part 60, 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.

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.

2.d The permittee shall not cause to be discharged into the atmosphere from the baghouse controlling the EAF, and the two LMFs, i.e., emissions units P901, P902, and P903, respectively, in excess of 0.0018 gr PE/dscf.

2.e The permittee shall not cause to be discharged into the atmosphere gases from the EAF which:

i. exit from a control device and exhibit 3 percent opacity or greater; and

ii. exit from a shop and, due solely to the operations of any affected EAF(s), exhibit 6 percent opacity or greater.

2.f The permittee shall not cause to be discharged into the atmosphere gases from the dust handling system any gases which exhibit 10 percent opacity or greater.

2.g Visible PE resulting from all operations in the melt shop shall not exceed 20% opacity (this includes the 6% opacity limit specified in A.I.2.e.).

2.h This emissions unit is exempt from the visible PE limitation specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions (continued)

2.i The permittee is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

2.j These emission limitations are for emissions units P901, P902 and P903, combined.

II. Operational Restrictions

1. The permittee shall limit hourly production to an average of 315 tons of liquid steel (measured as the total daily production divided by the number of hours the emissions unit was operated).

The annual production shall not exceed 2.25 million tons of liquid steel per year, based upon a rolling, 12-month summation of the monthly production rates.

2. The permittee shall follow the procedures outlined in its "Scrap Management Program" in order to minimize the use of scrap that contains mercury, lead, oils, plastics, and organic materials that are charged in the EAF. The "Scrap Management Program" was reviewed and approved by the appropriate Ohio EPA District Office.

3. 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 the fan motor amps value established during the most recent emission testing that demonstrated the emissions unit was in compliance.

4. The permittee shall implement the following control practices:

a. the post combustion chamber ignition burner set point shall be at a minimum of 1.0 MW (megawatt) during any EAF steel making operation;

b. the active EAF Direct-Shell Evacuation control system (DEC system) offgas ignition burner set point shall be at a minimum of 1.0 MW during any EAF steel making operation; and

c. the combustion air fan for the active EAF shell shall be set to ensure excess combustion air.

The permittee may petition the Ohio EPA to reestablish these set points whenever it can demonstrate to the agency's satisfaction that, by doing so, CO emissions will not increase above permitted levels.

III. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #03-09212, issued on 11-28-20: Monitoring and/or Record Keeping Requirements sections A.III. 1, 2, 3, 4, 5, 6, 7, 8 and 10. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

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

2. 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 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.

3. Except as provided for in section A.III.8, 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; or 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 their 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.

4. When the permittee is required to demonstrate compliance with the VE limitation in section A.I.2.e.ii. 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 Director'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.

5. 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.

6. 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.

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

7. Except as provided for in section A.III.8, 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.e.ii, 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.6 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 Director (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.

8. 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.

9. The permittee shall obtain an analysis of the EAF/LMF's baghouse dust on a monthly basis. At a minimum, the samples shall be analyzed for the magnesium, manganese, lead, mercury, and zinc contents. The results shall be reported in weight percent. This analysis shall be conducted in accordance with U.S. EPA test methods and procedures.

In conjunction with the baghouse dust analysis, the permittee shall record the following on a monthly basis:

a. the number of hours this emissions unit was in operation;

b. the individual hourly heavy metal (i.e., magnesium, manganese, lead, mercury, and zinc) emission rates determined by the following formula:

hme = wt x ct

where:

hme = the heavy metal emission rate, in pounds per hour

wt = the percent weight of each heavy metal listed above (determined from the baghouse dust analysis)

ct = PE rate (determined during the most recent compliance test);

c. the emissions of each heavy metal, in tons (b x a / 2000 pounds); and

d. the year-to-date heavy metal emissions (summation of c for all heavy metals), in tons.

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

10. The permittee shall maintain daily production records information each day for this emissions unit. At a minimum, these records shall contain the following information:

a. the hours of operation;

b. the tons of liquid steel produced; and

c. the average hourly production rate (b divided by a), in tons.

11. The permittee shall calculate and record the following information each month for this emissions unit and emissions units P901, P902, and P903, combined:

a. the amount of liquid steel produced [calculated by summing the daily production rates for the calendar month], in tons;

b. the rolling, 12-month summation of the monthly liquid steel production rates, in tons;

c. the rolling, 12-month SO2 emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs SO2/ton of steel produced), and then divided by 2000];

d. the rolling, 12-month NOx emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs NOx/ton of steel produced), and then divided by 2000]; and

e. the rolling, 12-month CO emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs CO/ton of steel produced), and then divided by 2000].

12. The permittee shall maintain a computer program for monitoring the set points established in condition A.II.4. The permittee shall also maintain daily records of all instances where this computer program triggered the cessation of, or delays in, furnace operations. The records shall include the reasons for any delay and/or cessation in furnace operations, the duration, a description of the corrective actions taken, and a determination whether or not a malfunction resulting in a violation of a condition of the permit has occurred.

13. Continuous CO Monitoring System:

13.a A statement of certification of the existing continuous CO monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

13.b The permittee shall operate and maintain existing equipment to continuously monitor and record mass emissions of CO from emissions units P901, P902, and P903. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one-minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (8 hour block), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

IV. Reporting Requirements

1. 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.e.ii of this permit.

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 value established in accordance with in section A.II.3 of this permit;

b. all periods of time during which any of the control system fan motor ampere values were outside the range in section A.II.3 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 accordance with section A.III.3 of this permit.

3. The permittee shall submit to the Director (the Ohio EPA, Northwest District Office), on a quarterly basis, copies of the baghouse dust analyses and calculated metals emission rates required by additional standard term and condition A.III.9 of this permit.

The permittee may request of the Director (the Ohio EPA, Northwest District Office) that these analyses be discontinued after the first two years if it is determined that the scrap management plan is effective in restricting these heavy metal emissions.

4. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each day during which the average hourly liquid steel production rate exceeded 315 tons;

b. each month during which the rolling, 12-month liquid steel production limitation exceeded 2.25 million tons; and

c. each month during which the rolling, 12-month SO2, NOx or CO emission limitations exceeded 281.3 tons, 641.3 and 9,450.0 tons, respectively.

5. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the parameters specified in section A.II.4. of this permit were not met.

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

7. Continuous CO Monitoring System:

7.a Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Director (the Ohio EPA, Northwest District Office) documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of the allowable limitation of 2,646 lbs CO/hr. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

7.b The permittee shall submit reports within 30 days following the end of each calendar quarter to the Director (the Ohio EPA, Northwest District Office) documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

IV. Reporting Requirements (continued)

7.c If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

7.d Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Director (the Ohio EPA, Northwest District Office) within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

7.e Within 180 days of the effective date of this permit, the permittee shall re-evaluate and update the written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for emissions units P901, P902, and P903 in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of this permit and within 12 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, OC and SO2. The permittee shall be deemed to be in compliance with the 15.6 lbs PE/hr and 0.0018 grain PE/dscf limitations for this emissions unit and the hourly and/or grain loading PE limitations for the other emissions units (i.e.,P902 and P903) vented to this baghouse only if the testing pursuant to this term and condition shows a PE grain loading not exceeding 0.0018 grain per dry standard cubic foot of exhaust gases.

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

i. PE: Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
ii. NOx: Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A;
iii. CO: Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A;
iv. OC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A;
v. SO2: Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; and
vi. Hg: Method 29 of 40 CFR, Part 60, Appendix A.

d. The emission testing shall be conducted while emissions units P901, P902, and P903 are operating at or near their maximum group capacity, unless otherwise specified or approved by the Director (the Ohio EPA, Northwest District Office). [The test(s) for OC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by tthe Director (the Ohio EPA, Northwest District Office).]

e. The OC, NOx, SO2, and CO emission testing may be conducted at the inlet to the baghouse before it combines with the gas streams from the other emissions units, if the other gas streams are being monitored simultaneously.

V. Testing Requirements (continued)

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

Personnel from the Director (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 Director (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 Director (the Ohio EPA, Northwest District Office).

3. The written report of the results of the PE test demonstrating compliance with the emission limit of 0.0018 grain/dscf shall 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.

V. Testing Requirements (continued)

4. As part of the stack test submittal, the permittee shall submit calculations for the pounds of emissions per ton of liquid steel produced for CO and NOx. The lbs of pollutant/ton of liquid steel produced shall be determined by dividing the average hourly mass emission rate for each pollutant as measured during the performance test, by the average hourly amount of liquid steel produced during the same period.

The permittee shall also submit calculations to determine the CO destruction efficiency of the shaft furnace/post combustion chamber as part of the stack test submittal. The following data shall be collected during the performance test, including efficiency calculatations:

a. the total pounds of each material charged/tapped (Pig Iron, Scrap Steel, Foamy Slag, Charge Carbon, Electrodes, Liquid Steel being tapped, etc.);

b. the percent by weight of carbon in each of the above items;

c. the pounds of carbon in each of the above items (pounds of material times the percent of carbon);

d. the total pounds of carbon during the test (the sum of item c. above for each charge material minus the amount of carbon removed in the tapped liquid steel);

e. the total pounds of oxygen needed to produce CO from the above total carbon (item d.) for the test (at 16 pounds of oxygen per 12 pounds of carbon);

f. the total pounds of CO produced (the sum of items d and e above);

g. the total amount of CO emitted during the test; and

h. the overall CO destruction efficiency (item f minus item g, and then the result shall be divided by item g and multiplied by 100%).

5. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

5.a Emission Limitations:
8.8 lbs PE/hr, 31.5 tons PE/yr (fugitive emissions)
6.7 lbs PM10/hr, 23.9 tons PM10/yr (fugitive emissions)

Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly PE limitation by multiplying the emission factor of 1.4 lbs PE/ton of steel* by the maximum hourly liquid steel production rate of 315 tons of steel/hr and by a capture efficiency factor of (1 - .98).**

The permittee may demonstrate compliance with the hourly PM10 limitation by multiplying the hourl PE by a factor of 0.76* (the portion of PE that is PM10).

The permittee may demonstrate compliance with the annual PE limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel* by the annual liquid steel production rate (as determined by the record keeping in condition A.III.11.) and by a capture efficiency factor of (1 - .98)**, and then dividing by 2000.

The permittee may demonstrate compliance with the annual PM10 limitation by multiplying the annual PE by a factor of 0.76* (the portion of PE that is PM10).

* as supplied by the permittee
** capture efficiency is assumed to be 98%

V. Testing Requirements (continued)

5.b Emission Limitations:
2488.5 lbs CO/hr, 8887.5 tons CO/yr (for this emissions unit)
170.1 lbs NOx/hr, 607.5 tons NOx/yr (for this emissions unit)
31.5 lbs SO2/hr, 112.5 tons SO2/yr (for this emissions unit)

The permittee may demonstrate compliance with the hourly allowable CO, NOx, and SO2 emission limitations by multiplying the appropriate emission factor of (0.54 lb NOx/ton of steel*, 0.1 lb SO2/ton of steel*, and 7.9 lbs CO/ton of steel*, respectively) by the maximum hourly liquid steel production rate of 315 tons of steel per hour.

If required, the permittee shall demonstrate compliance with the hourly allowable emission limitations for CO, NOx and SO2 in accordance with the following:

i. for CO, Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A;
ii. for NOx, Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A; and
iii. for SO2, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

The permittee may demonstrate compliance with the annual allowable CO, NOx, and SO2 emission limitations by multiplying the appropriate emission factor (0.54 lb NOx/ton of steel*, 0.1 lb SO2/ton of steel*, and 7.9 lbs CO/ton of steel*, respectively) by the annual liquid steel production (as determined by the record keeping in condition A.III.11), and then dividing by 2000.

* as supplied by the permittee

5.c Emission Limitations:
110.3 lbs OC/hr and 393.8 tons OC/yr (for this emissions unit)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25 or 25A, as appropriate.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the emission factor determined during the most recent emission testing (lbs OC/ton of steel produced) by the maximum annual liquid steel production (as determined by the record keeping in condition A.III.11), and dividing by 2000.

V. Testing Requirements (continued)

5.d Emission Limitations:
0.18 lb Pb/hr, 0.63 ton Pb/yr (fugitive metal emissions)
0.022 lb Hg/hr, 0.17 ton Hg/yr (fugitive metal emissions)
0.22 lb Mg/hr, 0.88 ton Mg/yr (fugitive metal emissions)
0.32 lb Mn/hr, 1.16 tons Mn/yr (fugitive metal emissions)
2.18 lbs Zn/hr, 7.75 tons Zn/yr (fugitive metal emissions)

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable fugitive emission limitations for each metal above by multiplying an emission factor of 1.4 lbs PE/ton of steel* by the maximum hourly liquid steel production rate of 315 tons steel/hr, and by a capture efficiency factor of (1 - .98).** This result is then multiplied by the appropriate*** weight percentage of each metal in the baghouse dust, based on the most recent baghouse dust analysis.

The permittee may demonstrate compliance with the annual fugitive emission limitations for each metal above by multiplying an emission factor of 1.4 lbs PE/ton of steel by the annual liquid steel production rate (as determinde by the record keeping in condition A.III.11), and by a capture efficiency factor of (1 - .98),** and then dividing by 2000 . This result is then multiplied by the appropriate*** weight percentage of each metal in the baghouse dust, based on the most recent baghouse dust analysis.

* supplied by the vendor
** the capture efficiency is assumed to be 98%
** for mercury emissions, the permitte shall use the baghouse dust data or the most recent emission test data, whichever yeilds a higher result

5.e Emission Limitations:
2646.0 lbs CO/hr, 9450.0 tons CO per rolling, 12-month period (for emissions unit P901, P902 and P903, combined)

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 through 4 and 10.

Also, the permittee may demonstrate compliance with the hourly limitation above based on the record keeping requirements for the continuous CO monitoring system as specified in section A.III.13 of this permit.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.11 of this permit.

5.f Emission Limitations:
179.6 lbs NOx/hr, 641.3 tons NOx per rolling, 12-month period (for emissions unit P901, P902, and P903, combined)

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 through 4 and 7.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.11 of this permit.

V. Testing Requirements (continued)

5.g Emission Limitations:
78.8 lbs SO2/hr, 281.3 tons SO2 per rolling, 12-month period
(for emissions unit P901, P902, and P903 combined)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.11 of this permit.

5.h Emission Limitation:
0.0018 grain PE/dscf, 15.6 lbs PE/hr, 68.2 tons PE/yr (for emissions unit P901, P902 and P903, combined)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the allowable grain PE/dscf limitation and the hourly allowable PE limitation based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

The annual PE limitation was developed by multiplying the hourly mass emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

5.i Emission Limitations:
0.31 lb Pb/hr, 1.36 tons Pb/yr*
0.44 lb Mg/hr, 1.91 tons Mg/yr*
0.58 lb Mn/hr, 2.52 tons Mn/yr*
3.85 lbs Zn/hr, 16.85 tons Zn/yr*

* from the baghouse serving emissions units P901, P902 and P903

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and annual allowable metal emission limitations above based upon the record keeping required in Section A.III.9 of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable metal emission limitations in accordance with approved USEPA test methods.

5.j Emission Limitations:
0.38 lb Hg/hr and 0.17 ton Hg/yr (from the baghouse serving emissions untis P901, P902 and P903)

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 40 CFR, Part 60, Appendix A, Method 29.

The permittee may also demonstrate compliance with the annual allowable Hg emission limitations based upon the record keeping required in Section A.III.9 of this permit.

V. Testing Requirements (continued)

5.k 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.

5.l 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.

5.m 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. An alternative exhaust gas discharge configuration for the baghouse controlling the EAF may be used if found to be acceptable by Ohio EPA, pursuant to the requirements of federal and State rules. No less than 60 days prior to changing the exhaust gas discharge configuration, a complete description of the changed must be submitted to Ohio EPA. The final plan must be approved by Ohio EPA prior to any alteration of the exhaust gas discharge configuration. The above exhaust gas discharge requirement is based on the proposed emission limits for the entire plant.

2. Pursuant to the requirements of PTI # 03-9212, the permittee shall continue to investigate and research the feasibility of reducing carbon monoxide emissions from the EAF. This investigation and research requirement shall expire two years after the final issuance of PTI #03-9212. The permittee shall submit detailed annual reports on the progress of their research to reduce CO emissions. These reports shall include the following information:

a. a description of any project conducted for the purpose of reducing CO emissions. This description should include the date conducted, any key process data collected and the duration of the project;

b. the results of any emissions testing conducted in relation to the above project;

c. a discussion of the results of the project. This should include the resulting CO emissions rate in pounds per hour and a description of the reason(s) why the project produced positive or negative* results; and

d. a date when any process modification was put into production for the purpose of reducing CO emissions.

*The permittee may proceed with CO reduction projects that could potentially result in short term CO emissions which are higher than those established by this permit. If the project is solely for the purpose of evaluating CO emissions and is appropriately documented as described above, it will not be considered a violation of the CO emission limits in this permit.

VI. Miscellaneous Requirements (continued)

3. These reports shall be submitted to the Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio, 43402 and to U.S. EPA, Region V. The reports shall be submitted semiannually. The first report shall be due six months from the date the final modified permit is issued and the final report shall be due two years from the date the final permit is issued.

The permittee shall begin utilizing any developed process change as soon as practically possible when the research has shown positive results and if the process change is economically feasible for the permittee to utilize. Economic feasibility shall be determined by Best Available Technology cost-effectiveness analysis.

After the two-year evaluation process is complete, the agency may reduce the allowable BACT CO emission limit if the data indicates the changes that have been implemented justify such a change.

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 Metallurgy Facility 1 (P902)

Activity Description: Refines molten steel from the 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
ladle metallurgy facility 1, with baghouse; 268 tons/hr	OAC rule 3745-17-07(A)	Visible paticulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	See A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-17-08(B)	See A.I.2.d.
	OAC rule 3745-31-05 (PTI 03-9212)	1.6 lbs PE/hr*, 6.8 tons PE/yr* (for this emissions unit) 1.2 lbs PM10/hr*, 5.1 tons PM10/yr* (for this emissions unit) 133.9 lbs CO/hr, 562.5 tons CO/yr (for this emissions unit) 8.0 lbs NOx/hr, 33.8 tons NOx/yr (for this emissions unit) 40.2 lbs SO2/hr, 168.8 tons SO2/yr (for this emissions unit)

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		0.0018 grain PE/dscf 15.6 lbs PE/hr 68.2 tons PE/yr (See A.I.2.i.) 78.8 lbs SO2/hr 281.3 tons SO2 per rolling, 12-month period (See A.I.2.i.) 179.6 lbsNOx/hr 641.3 tons NOx per rolling, 12-month period (See A.I.2.i.) 2646.0 lbs CO/hr 9450.0 tons CO per rolling, 12-month peroid (See A.I.2.i.) The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

*fugitive emissions

2. Additional Terms and Conditions

2.a The PE limitation established by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05.

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

2.c The SO2 limitation specified by this rule is less stringent than the SO2 limitation established pursuant to OAC rule 3745-31-05.

2.d The permittee is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

2.g This emissions unit is vented to a control device required to comply with the monitoring, record keeping and reporting requirements contained in 40 CFR, Part 60, Subpart AAa - Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983. Therefore, no additional monitoring, record keeping and reporting requirements are necessary for the control equipment that this emissions unit is vented to.

2.h The permittee shall not cause to be discharged into the atmosphere from the baghouse controlling the EAF, and the two LMFs, i.e., emissions units P901, P902, and P903, respectively, in excess of 0.0018 gr PE/dscf.

2.i These emission limitations are for emissions units P901, P902 and P903, combined.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #03-09212, issued on 11-28-00: Monitoring and/or Record Keeping Requirements section A.III.6. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

2. 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.

3. The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P901, P902 and P903) are operating in the melting and refining period.

4. 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.

5. 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.

6. 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.

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

7. The permittee shall calculate and record the following information each month for this emissions unit and emissions units P901, P902, and P903, combined:

a. the amount of liquid steel produced [calculated by summing the daily production rates for the calendar month], in tons;

b. the rolling, 12-month summation of the monthly liquid steel production rates, in tons;

c. the rolling, 12-month SO2 emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs SO2/ton of steel produced), and then divided by 2000];

d. the rolling, 12-month NOx emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs NOx/ton of steel produced), and then divided by 2000]; and

e. the rolling, 12-month CO emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs CO/ton of steel produced), and then divided by 2000].

8. Continuous CO Monitoring System:

8.a A statement of certification of the existing continuous CO monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

8.b The permittee shall operate and maintain existing equipment to continuously monitor and record mass emissions of CO from emissions units P901, P902, and P903. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one-minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (8 hour block), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

9. The permittee shall obtain an analysis of the EAF/LMF baghouse dust on a monthly basis. At a minimum, the samples shall be analyzed for the magnesium, manganese, lead, zinc, and mercury contents. The results shall be reported in weight percent. This analysis shall be conducted in accordance with U.S. EPA test methods and procedures.

In conjunction with the baghouse dust analysis, the permittee shall calculate the emissions of magnesium, manganese, lead, zinc, and mercury by multiplying the percent by weight of each metal by the PE rate as determined during the most recent emission test that demonstated the emissions unit was in compliance.

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.

IV. Reporting Requirements (continued)

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.

3. Continuous CO Monitoring System:

3.a Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Director (the Ohio EPA, Northwest District Office) documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of the allowable limitation of 2,646 lbs CO/hr. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

3.b The permittee shall submit reports within 30 days following the end of each calendar quarter to the Director (the Ohio EPA, Northwest District Office) documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

3.c If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3.d Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Director (the Ohio EPA, Northwest District Office) within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

3.e Within 180 days of the effective date of this permit, the permittee shall re-evaluate and update the written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

4. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month SO2, NOx or CO emission limitations exceeded 281.3 tons, 641.3 and 9,450.0 tons, respectively. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions, paragraph A.1.c of this permit.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for emissions units P901, P902, and P903 in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of this permit and within 12 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, OC and SO2. The permittee shall be deemed to be in compliance with the 15.6 lbs PE/hr and 0.0018 grain PE/dscf limitations for this emissions unit and the hourly and/or grain loading PE limitations for the other emissions units (i.e.,P901 and P903) vented to this baghouse only if the testing pursuant to this term and condition shows a PE grain loading not exceeding 0.0018 grain per dry standard cubic foot of exhaust gases.

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

i. PE: Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
ii. NOx: Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A;
iii. CO: Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A;
iv. OC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A;
v. SO2: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A; and
vi. Hg: Method 29 of 40 CFR, Part 60, Appendix A.

d. The emission testing shall be conducted while emissions units P901, P902, and P903 are operating at or near their maximum group capacity, unless otherwise specified or approved by the Director (the Ohio EPA, Northwest District Office). [The test(s) for OC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Director (the Ohio EPA, Northwest District Office).]

e. The OC, NOx, SO2, and CO emission testing may be conducted at the inlet to the baghouse before it combines with the gas streams from the other emissions units, if the other gas streams are being monitored simultaneously.

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

Personnel from the Director (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 Director (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 Director (the Ohio EPA, Northwest District Office).

2. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

2.a Emission Limitations:
1.6 lbs PE/hr, 6.8 tons/yr (fugitive emissions)
1.2 lbs PM10/hr, 5.1 tons PM10/yr (fugitive emissions)

Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly PE limitation by multiplying the emission factor of 0.6 lb PE/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel/hr and by a capture efficiency factor of (1 - .99).**

The permittee may demonstrate compliance with the hourly PM10 limitation by multiplying the hourl PE by a factor of 0.76* (the portion of PE that is PM10).

The permittee may demonstrate compliance with the annual PE limitation by multiplying an emission factor of 0.6 lb PE/ton of steel* by the annual liquid steel production rate (as determinde by the record keeping in condition A.III.7.) and by a capture efficiency factor of (1 - .99)**, and then dividing by 2000.

The permittee may demonstrate compliance with the annual PM10 limitation by multiplying the annual PE by a factor of 0.76* (the portion of PE that is PM10).

* as supplied by the permittee
** capture efficiency is assumed to be 99%

2.b Emission Limitations:
2646.0 lbs CO/hr, 9450.0 tons CO per rolling, 12-month period (for emissions unit P901, P902 and P903, combined)

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 through 4 and 10.

Also, the permittee may also demonstrate compliance with the hourly limitation above based on the record keeping requirements for the continuous CO monitoring system as specified in section A.III.8 of this permit.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.7 of this permit.

2.c Emission Limitations:
179.6 lbs NOx/hr, 641.3 tons NOx per rolling, 12-month period (for emissions unit P901, P902, and P903, combined)

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 through 4 and 7.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.7 of this permit.

V. Testing Requirements (continued)

2.d Emission Limitations:
78.8 lbs SO2/hr, 281.3 tons SO2 per rolling, 12-month period
(for emissions unit P901, P902, and P903, combined)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.7 of this permit.

2.e Emission Limitations:
0.0018 grain PE/dscf, 15.6 lbs PE/hr, 68.2 tons PE/yr (for emissions unit P901, P902 and P903, combined)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the allowable grain PE/dscf limitation and the hourly allowable PE limitation based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

The annual PE limitation was developed by multiplying the hourly mass emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.f Emission Limitations:
133.9 lbs CO/hr, 562.5 tons CO/yr

The permittee may demonstrate compliance with the hourly CO emission limitation by multiplying the emission factor 0.5 lb CO/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel per hour.

The permittee may demonstrate compliance with the annual CO emission limitation by multiplying the appropriate emission factor 0.50 lb CO/ton of steel* by the annual liquid steel production (as determined by the record keeping in condition A.III.7), and then dividing by 2000.

* as supplied by the permittee

2.g Emission Limitation:
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with visible PE limitation pursuant to OAC rule 3745-17-03(B)(1).*

*This emissions unit is vented to control equipment which is required under NSPS to maintain an opacity of less than 3% for emissions associated with an electric arc furnace or argon-oxygen decarburization vessel. As long as opacity from fugitive emissions leaving the melt shop are not greater than or equal to 3%, compliance with the opacity standard for this emissions unit shall be assumed.

V. Testing Requirements (continued)

2.h Emission Limitations:
8.0 lbs NOx/hr, 33.8 tons NOx per/yr

The permittee may demonstrate compliance with the hourly NOx emission limitation by multiplying the emission factor of 0.03 lb NOx/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel per hour.

The permittee may demonstrate compliance with the annual NOx emission limitations by multiplying the emission factor of 0.03 lb NOx/ton of steel* by the annual liquid steel production (as determined by the record keeping in condition A.III.7), and then dividing by 2000.

* as supplied by the permittee

2.i Emission Limitations:
40.2 lbs SO2/hr, 168.8 tons SO2 per/yr

The permittee may demonstrate compliance with the hourly SO2 emission limitation by multiplying the appropriate emission factor 0.15 lb SO2/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel per hour.

The permittee may demonstrate compliance with the annual SO2 emission limitation by multiplying the appropriate emission factor 0.15 lb SO2/ton of steel* by the annual liquid steel production (as determined by the record keeping in condition A.III.7), and then dividing by 2000.

* as supplied by the permittee

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: Ladle Metallurgy Facility 2 (P903)

Activity Description: Refines molten steel from the 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
ladle metallurgy facility 2, with baghouse; 268 tons/hr	OAC rule 3745-17-07(A)	Visible paticulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	See A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-17-08(B)	See A.I.2.d.
	OAC rule 3745-31-05 (PTI 03-9212)	1.6 lbs PE/hr*, 6.8 tons PE/yr* (for this emissions unit)
		1.2 lbs PM10/hr*, 5.1 tons PM10/yr* (for this emissions unit)
		133.9 lbs CO/hr, 562.5 tons CO/yr (for this emissions unit)
		8.0 lbs NOx/hr, 33.8 tons NOx/yr (for this emissions unit)
		40.2 lbs SO2/hr, 168.8 tons SO2/yr (for this emissions unit)

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		0.0018 grain PE/dscf 15.6 lbs PE/hr 68.2 tons PE/yr (See A.I.2.i.) 78.8 lbs SO2/hr 281.3 tons SO2 per rolling, 12-month period (See A.I.2.i.) 179.6 lbsNOx/hr 641.3 tons NOx per rolling, 12-month period (See A.I.2.i.) 2646.0 lbs CO/hr 9450.0 tons CO per rolling, 12-month peroid (See A.I.2.i.) The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

*fugitive emissions

2. Additional Terms and Conditions

2.a The PE limitation established by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05.

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

2.c The SO2 limitation specified by this rule is less stringent than the SO2 limitation established pursuant to OAC rule 3745-31-05.

2.d The permittee is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

2.g This emissions unit is vented to a control device required to comply with the monitoring, record keeping and reporting requirements contained in 40 CFR, Part 60, Subpart AAa - Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983. Therefore, no additional monitoring, record keeping and reporting requirements are necessary for the control equipment that this emissions unit is vented to.

2.h The permittee shall not cause to be discharged into the atmosphere from the baghouse controlling the EAF, and the two LMFs, i.e., emissions units P901, P902, and P903, respectively, in excess of 0.0018 gr PE/dscf.

2.i These emission limitations are for emissions units P901, P902 and P903, combined.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #03-09212, issued on 11-28-00: Monitoring and/or Record Keeping Requirements section A.III.6. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

2. 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.

3. The VE observations shall be conducted at least once per day when one or more of the furnaces (emissions units P901, P902 and P903) are operating in the melting and refining period.

4. 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.

5. 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.

6. 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.

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

7. The permittee shall calculate and record the following information each month for this emissions unit and emissions units P901, P902, and P903, combined:

a. the amount of liquid steel produced [calculated by summing the daily production rates for the calendar month], in tons;

b. the rolling, 12-month summation of the monthly liquid steel production rates, in tons;

c. the rolling, 12-month SO2 emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs SO2/ton of steel produced), and then divided by 2000];

d. the rolling, 12-month NOx emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs NOx/ton of steel produced), and then divided by 2000]; and

e. the rolling, 12-month CO emission rate, in tons, calculated by multiplying the rolling, 12-month summation of the monthly steel production rates by the emission factor determined during the most recent emission testing that demonstrated the emissions unit was in compliance (lbs CO/ton of steel produced), and then divided by 2000].

8. Continuous CO Monitoring System:

8.a A statement of certification of the existing continuous CO monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

8.b The permittee shall operate and maintain existing equipment to continuously monitor and record mass emissions of CO from emissions units P901, P902, and P903. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one-minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (8 hour block), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

9. The permittee shall obtain an analysis of the EAF/LMF baghouse dust on a monthly basis. At a minimum, the samples shall be analyzed for the magnesium, manganese, lead, zinc, and mercury contents. The results shall be reported in weight percent. This analysis shall be conducted in accordance with U.S. EPA test methods and procedures.

In conjunction with the baghouse dust analysis, the permittee shall calculate the emissions of magnesium, manganese, lead, zinc, and mercury by multiplying the percent by weight of each metal by the PE rate as determined during the most recent emission test that demonstated the emissions unit was in compliance.

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.

IV. Reporting Requirements (continued)

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.

3. Continuous CO Monitoring System:

3.a Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Director (the Ohio EPA, Northwest District Office) documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of the allowable limitation of 2,646 lbs CO/hr. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

3.b The permittee shall submit reports within 30 days following the end of each calendar quarter to the Director (the Ohio EPA, Northwest District Office) documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

3.c If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3.d Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Director (the Ohio EPA, Northwest District Office) within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

3.e Within 180 days of the effective date of this permit, the permittee shall re-evaluate and update the written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

4. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month SO2, NOx or CO emission limitations exceeded 281.3 tons, 641.3 and 9,450.0 tons, respectively. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions, paragraph A.1.c of this permit.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for emissions units P901, P902, and P903 in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of this permit and within 12 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, OC and SO2. The permittee shall be deemed to be in compliance with the 15.6 lbs PE/hr and 0.0018 grain PE/dscf limitations for this emissions unit and the hourly and/or grain loading PE limitations for the other emissions units (i.e.,P901 and P903) vented to this baghouse only if the testing pursuant to this term and condition shows a PE grain loading not exceeding 0.0018 grain per dry standard cubic foot of exhaust gases.

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

i. PE: Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
ii. NOx: Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A;
iii. CO: Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A;
iv. OC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A;
v. SO2: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A; and
vi. Hg: Method 29 of 40 CFR, Part 60, Appendix A.

d. The emission testing shall be conducted while emissions units P901, P902, and P903 are operating at or near their maximum group capacity, unless otherwise specified or approved by the Director (the Ohio EPA, Northwest District Office). [The test(s) for OC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Director (the Ohio EPA, Northwest District Office).]

e. The OC, NOx, SO2, and CO emission testing may be conducted at the inlet to the baghouse before it combines with the gas streams from the other emissions units, if the other gas streams are being monitored simultaneously.

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

Personnel from the Director (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 Director (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 Director (the Ohio EPA, Northwest District Office).

2. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

2.a Emission Limitations:
1.6 lbs PE/hr, 6.8 tons/yr (fugitive emissions)
1.2 lbs PM10/hr, 5.1 tons PM10/yr (fugitive emissions)

Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly PE limitation by multiplying the emission factor of 0.6 lb PE/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel/hr and by a capture efficiency factor of (1 - .99).**

The permittee may demonstrate compliance with the hourly PM10 limitation by multiplying the hourl PE by a factor of 0.76* (the portion of PE that is PM10).

The permittee may demonstrate compliance with the annual PE limitation by multiplying an emission factor of 0.6 lb PE/ton of steel* by the annual liquid steel production rate (as determinde by the record keeping in condition A.III.7.) and by a capture efficiency factor of (1 - .99)**, and then dividing by 2000.

The permittee may demonstrate compliance with the annual PM10 limitation by multiplying the annual PE by a factor of 0.76* (the portion of PE that is PM10).

* as supplied by the permittee
** capture efficiency is assumed to be 99%

2.b Emission Limitations:
2646.0 lbs CO/hr, 9450.0 tons CO per rolling, 12-month period (for emissions unit P901, P902 and P903, combined)

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 through 4 and 10.

Also, the permittee may also demonstrate compliance with the hourly limitation above based on the record keeping requirements for the continuous CO monitoring system as specified in section A.III.8 of this permit.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.7 of this permit.

2.c Emission Limitations:
179.6 lbs NOx/hr, 641.3 tons NOx per rolling, 12-month period (for emissions unit P901, P902, and P903, combined)

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 through 4 and 7.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.7 of this permit.

V. Testing Requirements (continued)

2.d Emission Limitations:
78.8 lbs SO2/hr, 281.3 tons SO2 per rolling, 12-month period
(for emissions unit P901, P902, and P903, combined)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

The permittee may determine compliance with the annual allowable limitation pursuant to the record keeping required in section A.III.7 of this permit.

2.e Emission Limitations:
0.0018 grain PE/dscf, 15.6 lbs PE/hr, 68.2 tons PE/yr (for emissions unit P901, P902 and P903, combined)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the allowable grain PE/dscf limitation and the hourly allowable PE limitation based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

The annual PE limitation was developed by multiplying the hourly mass emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.f Emission Limitations:
133.9 lbs CO/hr, 562.5 tons CO/yr

The permittee may demonstrate compliance with the hourly CO emission limitation by multiplying the emission factor 0.5 lb CO/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel per hour.

The permittee may demonstrate compliance with the annual CO emission limitation by multiplying the appropriate emission factor 0.50 lb CO/ton of steel* by the annual liquid steel production (as determined by the record keeping in condition A.III.7), and then dividing by 2000.

* as supplied by the permittee

2.g Emission Limitation:
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with visible PE limitation pursuant to OAC rule 3745-17-03(B)(1).*

*This emissions unit is vented to control equipment which is required under NSPS to maintain an opacity of less than 3% for emissions associated with an electric arc furnace or argon-oxygen decarburization vessel. As long as opacity from fugitive emissions leaving the melt shop are not greater than or equal to 3%, compliance with the opacity standard for this emissions unit shall be assumed.

V. Testing Requirements (continued)

2.h Emission Limitations:
8.0 lbs NOx/hr, 33.8 tons NOx per/yr

The permittee may demonstrate compliance with the hourly NOx emission limitation by multiplying the emission factor of 0.03 lb NOx/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel per hour.

The permittee may demonstrate compliance with the annual NOx emission limitations by multiplying the emission factor of 0.03 lb NOx/ton of steel* by the annual liquid steel production (as determined by the record keeping in condition A.III.7), and then dividing by 2000.

* as supplied by the permittee

2.i Emission Limitations:
40.2 lbs SO2/hr, 168.8 tons SO2 per/yr

The permittee may demonstrate compliance with the hourly SO2 emission limitation by multiplying the appropriate emission factor 0.15 lb SO2/ton of steel* by the maximum hourly liquid steel production rate of 268 tons of steel per hour.

The permittee may demonstrate compliance with the annual SO2 emission limitation by multiplying the appropriate emission factor 0.15 lb SO2/ton of steel* by the annual liquid steel production (as determined by the record keeping in condition A.III.7), and then dividing by 2000.

* as supplied by the permittee

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

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