OhioEPA

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

12/31/01

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

03-26-00-0073
North Star BHP Steel L. L. C.
James E. Amburgey
6767 County Road 9
P.O. Box 128
Delta, OH 43515

Dear James E. Amburgey:

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

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

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

Very truly yours,

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

cc: USEPA (electronically submitted)
File, DAPC PMU
Northwest District Office
Indiana
Michigan

State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 12/31/01	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 (Tunnel Furnace 2)
Maintains the slab temperature for hot rolling

P003 (Finishing Mill)
Shapes steel slabs into 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. Scrap steel is charged from the top; liquid steel is tapped from the bottom.

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 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.
ii. The date(s) analyses were performed.
iii. The company or entity that performed the analyses.
iv. The analytical techniques or methods used.
v. The results of such analyses.
vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to

the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

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

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

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

8. Marketable Permit Programs

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

9. Reasonably Anticipated Operating Scenarios

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

10. Reopening for Cause

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

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

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

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

   i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but

excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

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

14. Operational Flexibility

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

15. Emergencies

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

16. Off Permit Changes

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

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;

b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

17. Compliance Method Requirements

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

18. Insignificant Activity

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

B. State Only Enforceable Section

1. Permit to Install Requirement

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Additional Reporting Requirements When There Are No Deviations of <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 (Z001);
Ladle Rebuild Area (Z002);
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); and
Caster Space Heater (Z012).

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 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 #03-9212, issued on April 30, 1999: 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.

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

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

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

5. 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:

V. Testing Requirements (continued)

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.

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)	0.020 lb PE/mmBtu of actual heat input 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 0.32 lb organic compounds (OC)/hr 1.39 tons OC/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 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 03-3025.

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 6 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 appropriate Ohio EPA District Office or local air agency.

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

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

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

V. Testing Requirements (continued)

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

2.d 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.e 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.f Emission Limitations: 0.32 lb OC/hr and 1.39 tons OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

2.g Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.32 lb/hr and 1.39 tons/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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 2 (P002)

Activity Description: Maintains the slab temperature 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 #2 (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)	0.020 lb PE/mmBtu of actual heat input 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 0.17 lb organic compounds (OC)/hr 0.74 ton OC/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.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 03-3025.

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 6 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 appropriate Ohio EPA District Office or local air agency.

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

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

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

V. Testing Requirements (continued)

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

2.d 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.

V. Testing Requirements (continued)

2.e 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.

2.f Emission Limitations: 0.17 lb OC/hr and 0.74 ton OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

2.g Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.32 lb/hr and 1.39 tons/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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 steel slabs into 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 appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall notify the Director (appropriate Ohio EPA District Office or local air agency) 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 (appropriate Ohio EPA District Office or local air agency) 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 shall demonstrate compliance with the hourly allowable PE limitation based on the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

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

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).

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

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

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

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 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 capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

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

Personnel from the appropriate Ohio EPA 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office.

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)	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)	0.020 lb PE/mmBtu of actual heat input 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 0.11 lb organic compounds (OC)/hr 0.46 ton OC/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 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 03-3025.

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: 0.06 lb PE/hr and 0.26 ton 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.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 visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.d 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.e 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.

1.f Emission Limitations: 0.11 lb OC/hr and 0.46 ton OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.11 lb/hr and 0.46 ton/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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)	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)	0.020 lb PE/mmBtu of actual heat input 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 0.11 lb organic compounds (OC)/hr 0.46 ton OC/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 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 03-3025.

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: 0.06 lb PE/hr and 0.26 ton 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.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 visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.d 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.e 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.

1.f Emission Limitations: 0.11 lb OC/hr and 0.46 ton OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.11 lb/hr and 0.46 ton/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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)	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)	0.020 lb PE/mmBtu of actual heat input 0.05 lb PE/hr 0.21 ton PE/yr 0.096 lb sulfur dioxide (SO2)/hr 0.042 ton SO2/yr 1.6 lbs nitrogen oxides (NOx)/hr 7.01 ton NOx/yr 0.32 lbs carbon monoxide (CO)/hr 1.4 ton CO/yr 0.08 lbs organic compounds (OC)/hr 0.37 ton OC/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 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 03-3025.

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: 0.05 lb PE/hr and 0.21 ton 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.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 visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.d 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.e 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.

1.f Emission Limitations: 0.08 lb OC/hr and 0.37 ton OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.08 lb/hr and 0.37 ton/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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)	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)	0.020 lb PE/mmBtu of actual heat input 0.05 lb PE/hr 0.21 ton PE/yr 0.096 lb sulfur dioxide (SO2)/hr 0.042 ton SO2/yr 1.6 lbs nitrogen oxides (NOx)/hr 7.01 ton NOx/yr 0.32 lbs carbon monoxide (CO)/hr 1.4 ton CO/yr 0.08 lbs organic compounds (OC)/hr 0.37 ton OC/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 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 03-3025.

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: 0.05 lb PE/hr and 0.21 ton 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.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 visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.d 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.e 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.

1.f Emission Limitations: 0.08 lb OC/hr and 0.37 ton OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.08 lb/hr and 0.37 ton/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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)	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)	0.020 lb PE/mmBtu of actual heat input 0.05 lb PE/hr 0.21 ton PE/yr 0.096 lb sulfur dioxide (SO2)/hr 0.042 ton SO2/yr 1.6 lbs nitrogen oxides (NOx)/hr 7.01 ton NOx/yr 0.32 lbs carbon monoxide (CO)/hr 1.4 ton CO/yr 0.08 lbs organic compounds (OC)/hr 0.37 ton OC/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 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 03-3025.

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: 0.05 lb PE/hr and 0.21 ton 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.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 visible PE limitations pursuant to OAC rule 3745-17-03(B)(1).

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the 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 hours/year 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 6, which is located in 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.d 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.e 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.

1.f Emission Limitations: 0.08 lb OC/hr and 0.37 ton OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable OC 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 5.5 lbs OC/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 OC emission limitation in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb PE/mmBtu allowable limitation by multiplying the maximum hourly natural gas consumption rate (mm cu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mmcu.ft, and then dividing by the maximum heat input capacity of the furnace (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable limitation shall be determined in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The permittee was issued a permit to install (PTI # 03-9212) for this emissions unit on April 30, 1999. PTI #03-9212 established OC emission limitations of 0.08 lb/hr and 0.37 ton/yr based on USEPA's Compilation of Air Pollutant Emission Factors (AP-42), Section 1.4, Natural Gas Combustion (revised 1/95) of 2.8 lbs OC/mm cu.ft. However, the OC emission factor of 2.8 lbs OC/mm cu.ft. was revised to 5.5 lbs OC/mm cu.ft. (revised 7/98). Therefore, this emissions unit is now in violation of the OC emission limitations established in PTI #03-9212. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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
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 appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance 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. Scrap steel is charged from the top; liquid steel is tapped from the bottom.

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.j.
	OAC rule 3745-17-08(B)	See A.I.2.k.
	OAC rule 3745-31-05 (PTI 03-9212)	0.0018 grain particulate emissions (PE) /dscf (See A.I.2.d.) 15.6 lbs PE/hr* 68.2 tons PE/yr* (See A.I.2.h.) 8.8 lbs PE/hr (fugitive) 31.5 tons PE/yr (fugitive) 6.7 lbs PM10/hr (fugitive) 23.9 tons PM10/yr (fugitive) 2205.0 lbs carbon monoxide (CO)/hr 7875.0 tons CO/yr* 170.1 lbs nitrogen oxides (NOx)/hr* 607.5 tons NOx/yr* 31.5 lbs sulfur dioxide (SO2)/yr* 112.5 tons SO2/yr* 110.3 lbs organic componds (OC)/hr 393.8 tons OC/yr* 0.31 lb lead (Pb)/hr* 1.36 tons Pb/yr* (See A.I.2.i.)

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		0.38 lb mercury (Hg)/hr 0.17 tons Hg/yr (See A.I.2.i.)
		0.44 lb magnesium (Mg)/hr* 1.91 tons Mg/yr* (See A.I.2.i.)
		0.58 lb manganese (Mn)/hr* 2.52 tons Mn/yr* (See A.I.2.i.)
		3.85 lb zinc (Zn)/hr* 16.85 tons Zn/yr* (See A.I.2.i.)
		0.18 lb Pb/hr (fugitive) 0.63 tons Pb/yr (fugitive)
		0.022 lb Hg/hr (fugitive) 0.17 tons Hg/yr (fugitive)
		0.22 lb Mg/hr (fugitive) 0.88 tons Mg/yr (fugitive)
		0.32 lb Mn/hr (fugitive) 1.16 tons Mn/yr (fugitive)
		2.18 lb Zn/hr (fugitive) 7.75 tons Zn/yr (fugitive)
		The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart AAa.
	40 CFR, Part 60, Subpart AAa	See A.I.2.b and A.I.2.e through A.I.2.g.

* stack 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, the two LMFs, and the continuous casting process, i.e., emissions units P901, P902, P903 and P904, respectively, in excess of 0.0018 gr PE/dscf.

2. Additional Terms and Conditions (continued)

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 These PE limitations are for emissions units P901, P902, P903 and P904, combined.

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

2.j 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.k 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).

II. Operational Restrictions

1. The permittee shall limit the hourly production rate to 315 tons of steel and the annual production rate to 2.25 million tons of steel per rolling, 12-month summation.

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 maximum value/range measured during the most recent emission testing that demonstrated the emissions unit was in compliance.

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 #03-9212, issued on 4-30-99: Monitoring and/or Record Keeping Requirements sections 1, 2, 3, and 4. 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. 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 appropriate Ohio EPA 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 appropriate Ohio EPA 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 appropriate Ohio EPA 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 appropriate Ohio EPA District Office or local air agency) may require, the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required pursuant to section A.III.6 above. The permittee may petition the Director (the appropriate Ohio EPA District Office) for reestablishment of the pressure whenever the permittee can demonstrate to the Director's (the appropriate Ohio EPA 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 appropriate Ohio EPA 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, 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 the EAF and LMF's were in operation;

b. the individual hourly heavy metal (i.e., magnesium, manganese, lead, 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 for the EAF and LMF. These records, at a minimum, shall contain the following information:

a. the number of hours the EAF and LMF were in operation;

b. the tons of steel produced; and

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

11. The permittee shall also calculate and record the following information for each month for the furnace and ladle melt stations associated with this emissions unit:

a. the amount of steel produced, in tons (calculated by summing the daily production rates (from section 10.b above) for the calendar month; and

b. the rolling, 12-month production rates of steel, in tons.

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 4-30-99: Reporting Requirements 2, 3 and 4. 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 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.

3. 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 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 section A.III.3 of this permit.

4. The permittee shall submit to the appropriate Ohio EPA 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.3.

The permittee may request of the appropriate Ohio EPA 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.

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

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

b. each month during which the rolling, 12-month steel production rate exceeded 2.25 million tons.

6. 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 this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Hg, CO, PE, NOx, 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:

PE: Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
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;
OC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A;
SO2: Method 6 of 40 CFR, Part 60, Appendix A; and
Hg: Method 29 of 40 CFR, Part 60, Appendix A.

d. The test(s) for PE shall be conducted while emissions units P901, P902, P903 and P904 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office.

e. The test(s) for Hg shall be conducted while emissions units P901, P902 and P903 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office.

f. The tests for SO2, NOx, CO and OC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. The tests may be conducted on the gas stream exiting this emissions unit or at the inlet to the baghouse before it combines with the gas streams from the other emissions units.

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

Personnel from the appropriate Ohio EPA 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office.

V. Testing Requirements (continued)

2. The written report of the results of the PE test demonstrating compliance with the emission limit 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.

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

3.a Emission Limitation:
0.0018 grain PE/dscf (for emissions unit P901, P902, P903 and P904, combined)

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

3.b Emission Limitations:
15.6 lbs PE/hr and 68.2 tons PE/yr (for emissions unit P901, P902 and P903, combined)

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

The annual PE limitation was developed by multiplying the hourly 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.

V. Testing Requirements (continued)

3.c Emission Limitations:
8.8 lbs PE/hr (fugitive) and 31.5 tons PE/yr (fugitive)

Applicable Compliance Method:
Compliance with the hourly allowable PE limitation above may be determined by multiplying an emission factor of 1.4 lbs PE/ton of steel* by the maximum hourly steel production rate (tons/hr) and by a capture efficiency factor of (1 - .98).**

The permittee shall determine compliance with the annual allowable PE limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum allowable annual steel production rate (2,250,000 tons/yr) and by a capture efficiency factor of (1 - .98)**, and then dividing by 2000.

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

3.d Emission Limitations:
6.7 lbs PM10/hr (fugitive) and 23.9 tons PM10/yr (fugitive)

Applicable Compliance Method:
Compliance with the hourly allowable PM10 emission limitation above shall be demonstrated by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum hourly steel production rate of (tons steel/hr) and by a capture efficiency factor of (1 - .98).** This result shall then be multiplied by the PM10 portion of PE (0.76).*

The permittee shall demonstrate compliance with the annual PM10 emission limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum annual steel production rate (2,250,000 tons steel/yr) and by a capture efficiency factor of (1 - .98),** and then dividing by 2000. This result shall then be multiplied by the PM10 portion of PE (0.76).*

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

3.e Emission Limitations:
2205.0 lbs CO/hr and 7875.0 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 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

The permittee shall determine compliance with the annual limitation by multiplying the emission factor determined during the most recent emission testing (lbs CO/ton of steel produced) by the maximum annual steel production rate (tons/yr), and then dividing by 2000.

3.f Emission Limitations:
170.1 lbs NOx/hr and 607.5 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 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The permittee shall determine compliance with the annual limitation by multiplying the emission factor determined during the most recent emission testing (lbs NOx/ton of steel produced) by the maximum annual steel production rate (tons/yr), and then dividing by 2000.

V. Testing Requirements (continued)

3.g Emission Limitations:
31.5 lbs SO2/hr and 112.5 tons SO2/yr

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 6.

The permittee shall determine compliance with the annual limitation by multiplying the emission factor determined during the most recent emission testing (lbs SO2/ton of steel produced) by the maximum annual steel production rate (tons/yr), and then dividing by 2000.

3.h Emission Limitations:
110.3 lbs OC/hr and 393.8 tons OC/yr

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

The permittee shall determine compliance with the annual limitation by multiplying the emission factor determined during the most recent emission testing (lbs OC/ton of steel produced) by the maximum annual steel production rate (tons/yr), and then dividing by 2000.

3.i Emission Limitations:
0.31 lb Pb/hr and 1.36 tons Pb/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and annual allowable Pb emission limitations based upon the record keeping required in Section A.III.3 of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable Pb emission limitation pursuant to Methods 12 and 29 of 40 CFR, Part 60, Appendix A.

3.j Emission Limitations:
0.38 lb Hg/hr and 0.17 ton Hg/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable Hg emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 29.

The permittee shall determine compliance with the annual limitation by multiplying the emission factor determined during the most recent emission testing (lbs Hg/ton of steel produced) by the maximum annual steel production rate (tons/yr), and then dividing by 2000.

3.k Emission Limitations:
0.44 lb Mg/hr and 1.91 tons Mg/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and annual allowable Mg emission limitations based upon the record keeping required in section A.III.3 of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable Mg emission limitation pursuant to Method 29 of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

3.l Emission Limitations:
0.58 lb Mn/hr and 2.52 tons Mn/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and annual allowable Mn emission limitations based upon the record keeping required in section A.III.3 of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable Mn emission limitation pursuant to Method 29 of 40 CFR, Part 60, Appendix A.

3.m Emission Limitations:
3.85 lbs Zn/hr and 16.85 tons Zn/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and annual allowable Zn emission limitations based upon the record keeping required in section A.III.3 of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable Zn emission limitation pursuant to Method 29 of 40 CFR, Part 60, Appendix A.

3.n Emission Limitations:
0.18 lb Pb/hr (fugitive) and 0.63 ton Pb/yr (fugitive)

Applicable Compliance Method:

Compliance with the hourly allowable fugitive Pb emission limitation above shall be determined by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum hourly steel production rate (tons steel/hr) and by a capture efficiency factor of (1 - .98).** This result shall then be multiplied by the weight percentage of Pb metal in the baghouse dust (based on the most recent baghouse dust analysis).

The permittee shall demonstrate compliance with the annual limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum annual steel production rate (2,250,000 tons steel/yr) and by a capture efficiency factor of (1 - .98),** and then dividing by 2000. This result shall then be multiplied by the weight percentage of Pb metal in the baghouse dust (based on the most recent baghouse dust analysis).

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

3.o Emission Limitations:
0.022 lb Hg/hr (fugitive) and 0.17 ton Hg/yr (fugitive)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable fugitive Hg emission limitation by multiplying the hourly Hg stack emissions (based on the most recent stack test that demonstrated compliance) by a factor of 0.36 (based on company-supplied data, the apportioned fugitive Hg emissions represent 36% of the stack Hg emissions).

The permittee shall show compliance with the annual limitation by multiplying the emission factor determined during the most recent testing by (0.36) by the maximum annual steel production rate and dividing by 2000.

V. Testing Requirements (continued)

3.p Emission Limitations:
0.22 lb Mg/hr (fugitive) and 0.88 ton Mg/yr (fugitive)

Applicable Compliance Method:

Compliance with the hourly allowable fugitive Mg emission limitation above shall be determined by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum hourly steel production rate of (tons steel/hr) and by a capture efficiency factor of (1 - .98).** This result shall then be multiplied by the weight percentage of Mg metal in the baghouse dust (based on the most recent baghouse dust analysis).

The permittee shall demonstrate compliance with the annual limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum annual steel production rate (2,250,000 tons steel/yr) and by a capture efficiency factor of (1 - .98),** and then dividing by 2000. This result shall then be multiplied by the weight percentage of Mg metal in the baghouse dust (based on the most recent baghouse dust analysis).

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

3.r Emission Limitations:
0.32 lb Mn/hr (fugitive) and 1.16 tons Mn/yr (fugitive)

Applicable Compliance Method:

Compliance with the hourly allowable fugitive Mn emission limitation above shall be determined by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum hourly steel production rate of (tons steel/hr) and by a capture efficiency factor of (1 - .98).** This result shall then be multiplied by the weight percentage of Mn metal in the baghouse dust (based on the most recent baghouse dust analysis).

The permittee shall demonstrate compliance with the annual limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum annual steel production rate (2,250,000 tons steel/yr) and by a capture efficiency factor of (1 - .98,)** and then dividing by 2000. This result shall then be multiplied by the weight percentage of Mn metal in the baghouse dust (based on the most recent baghouse dust analysis).

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

3.s Emission Limitations:
2.18 lbs Zn/hr (fugitive) and 7.75 tons Zn/yr (fugitive)

Applicable Compliance Method:

Compliance with the hourly allowable fugitive Zn limitation above shall be determined by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum hourly steel production rate of (tons steel/hr) and by a capture efficiency factor of (1 - .98).** This result shall then be multiplied by the weight percentage of Zn metal in the baghouse dust (based on the most recent baghouse dust analysis).

The permittee shall demonstrate compliance with the annual limitation by multiplying an emission factor of 1.4 lbs PE/ton of steel by the maximum annual steel production rate (2,250,000 tons steel/yr) and by a capture efficiency factor of (1 - .98),** and then dividing by 2000. This result shall then be multiplied by the weight percentage of Zn metal in the baghouse dust (based on the most recent baghouse dust analysis).

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

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

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

V. Testing Requirements (continued)

3.v 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.

3.w 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

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 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; 158 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)	0.0018 grain PE/dscf (See A.I.2.h.) 15.6 lbs PE/hr* 68.2 tons PE/yr* (See A.I.2.e.) 0.95 lb PE/hr (fugitive) 3.38 tons PE/yr (fugitive) 0.72 lb PE10/hr (fugitive) 2.57 tons PE10/yr (fugitive) 78.8 lbs CO/hr* 281.3 tons CO/yr*

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		4.73 lbs NOx/hr* 16.88 tons NOx/yr* 23.7 lbs SO2/hr* 84.38 tons SO2/yr* 0.31 lb Pb/hr* 1.36 tons Pb/yr* (See A.I.2.f.) 0.38 lb Hg/hr* 0.17 ton Hg/yr* (See A.I.2.f.) 0.44 lb Mg/hr* 1.91 tons Mg/yr* (See A.I.2.f.) 0.58 lb Mn/hr* 2.52 tons Mn/yr* (See A.I.2.f.) 3.85 lbs Zn/hr* 16.85 tons Zn/yr* (See A.I.2.f.) The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-17-07(A).

* stack 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.e These PE limitations are for emissions units P901, P902, P903 and P904, combined.

2.f The metal emission limitations are for emissions units P901, P902 and P903, combined.

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. Additional Terms and Conditions (continued)

2.h The permittee shall not cause to be discharged into the atmosphere from the baghouse controlling the EAF, the two LMFs, and the continuous casting process, i.e., emissions units P901, P902, P903 and P904, respectively, in excess of 0.0018 gr PE/dscf.

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 #03-9212, issued on 4-30-99: Monitoring and/or Record Keeping Requirement A.III.2 and 7. 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 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.

3. 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.

4. The VE observations shall be conducted at least once per day when emissions unit P901 is operating in the melting and refining period.

5. 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.

6. 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.

7. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any building openings housing this emissions unit. These building openings shall include, but not limited to, doorways, windows, and roof monitors. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. 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 4-30-99: Reporting Requirements 2 - 4. 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit to the Ohio EPA field 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.2. of this permit.

The permittee may request to Ohio EPA, NWDO 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.

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

4. 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 appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Hg, CO, PE, NOx, 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:

PE: Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
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;
OC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A;
SO2: Method 6 of 40 CFR, Part 60, Appendix A; and
Hg: Method 29 of 40 CFR, Part 60, Appendix A.

d. The test(s) for PE shall be conducted while emissions units P901, P902, P903 and P904 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

e. The test(s) for Hg shall be conducted while emissions units P901, P902 and P903 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. The tests for SO2, NOx, CO and OC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. The tests may be conducted

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

Personnel from the appropriate Ohio EPA 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office.

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

2.a Emission Limitation:

0.0018 grain/dscf

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

2.b Emission Limitations:

15.6 lbs PE/hr and 68.2 tons PE/yr

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

The tons/yr emission limitation was developed by multiplying the pounds/hour 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.

V. Testing Requirements (continued)

2.c Emission Limitations:

0.95 lb PE/hr (fugitive) and 3.38 tons PE/yr (fugitive)

Applicable Compliance Method:
Compliance with the hourly allowable PE limitation may be determined by multiplying an emission factor of 0.6 lb PE/ton of steel by the maximum hourly steel production rate (158 tons steel/hr) and by a capture efficiency factor of (1 - .99).*

The permittee shall demonstrate compliance with the annual limitation by multiplying the above emission factor by the maximum steel refining (production) rate, and by a capture efficiency factor of (1 - .99)* and dividing by 2000.

* capture efficiency is assumed to be 98%

2.d Emission Limitations:

0.72 lb PM10/hr (fugitive) and 2.57 tons PM10/yr (fugitive)

Applicable Compliance Method:
Compliance with the hourly allowable PE limitation may be determined by multiplying an emission factor of 0.6 lb PE/ton of steel by the maximum hourly steel production rate (158 tons steel/hr) and by a capture efficiency factor of (1 - .99).** This result shall then be multiplied by the PM10 portion of PE (0.76).*

The permittee shall demonstrate compliance with the annual limitation by multiplying the above emission factor by the rolling 12-month steel refining (production) rate, and by a capture efficiency factor of (1 - .99)** and dividing by 2000. This result multiplied by the PM10 portion of PE (0.76)*.

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

2.e Emission Limitations:

78.8 lbs CO/hr and 281.3 tons CO/yr

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

The permittee shall demonstrate compliance with the annual limitation by multiplying the emission factor determined during the most recent testing (lbs CO/ton) by the maximum annual steel production rate and dividing by 2000.

2.f Emission Limitations:

4.73 lbs NOx/hr and 16.88 tons NOx/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly 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 shall demonstrate compliance with the annual limitation by multiplying the emission factor determined during the most recent testing (lbs NOx/ton) by the maximum annual steel production rate, and then dividing by 2000.

V. Testing Requirements (continued)

2.g Emission Limitations:

23.7 lbs SO2/hr and 84.38 tons SO2/yr

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

The permittee shall demonstrate compliance with the annual limitation by multiplying the emission factor determined during the most recent testing (lbs SO2/ton) by the maximum annual steel production rate, and then dividing by 2000.

2.h Emission Limitations:

0.31 lb Pb/hr and 1.36 tons Pb/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Pb emission limitation above by multiplying the hourly Pb rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Pb metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.i Emission Limitations:

0.38 lb Hg/hr and 0.17 tons Hg/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Hg emission limitation above by multiplying the hourly Hg rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Hg metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.j Emission Limitation:

0.44 lb Mg/hr and 1.91 tons Mg/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Mg emission limitation above by multiplying the hourly Mg rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Mg metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.

V. Testing Requirements (continued)

2.k Emission Limitation:

0.58 lb Mn/hr and 2.52 tons Mn/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Mn emission limitation above by multiplying the hourly Mn rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Mn metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.l Emission Limitation:

3.85 lbs Zn/hr and 16.85 tons Zn/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Zn emission limitation above by multiplying the hourly Zn rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Zn metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.m 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.

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; 158 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)	0.0018 grain PE/dscf (See A.I.2.h.) 15.6 lbs PE/hr* 68.2 tons PE/yr* (See A.I.2.e.) 0.95 lb PE/hr (fugitive) 3.38 tons PE/yr (fugitive) 0.72 lb PE10/hr (fugitive) 2.57 tons PE10/yr (fugitive) 78.8 lbs CO/hr* 281.3 tons CO/yr*

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
		4.73 lbs NOx/hr* 16.88 tons NOx/yr* 23.7 lbs SO2/hr* 84.38 tons SO2/yr* 0.31 lb Pb/hr* 1.36 tons Pb/yr* (See A.I.2.f.) 0.38 lb Hg/hr* 0.17 ton Hg/yr* (See A.I.2.f.) 0.44 lb Mg/hr* 1.91 tons Mg/yr* (See A.I.2.f.) 0.58 lb Mn/hr* 2.52 tons Mn/yr* (See A.I.2.f.) 3.85 lbs Zn/hr* 16.85 tons Zn/yr* (See A.I.2.f.) The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-17-07(A).

* stack 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.e These PE limitations are for emissions units P901, P902, P903 and P904, combined.

2.f The metal emission limitations are for emissions units P901, P902 and P903, combined.

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. Additional Terms and Conditions (continued)

2.h The permittee shall not cause to be discharged into the atmosphere from the baghouse controlling the EAF, the two LMFs, and the continuous casting process, i.e., emissions units P901, P902, P903 and P904, respectively, in excess of 0.0018 gr PE/dscf.

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 #03-9212, issued on 4-30-99: Monitoring and/or Record Keeping Requirement A.III.2 and 7. 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 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.

3. 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.

4. The VE observations shall be conducted at least once per day when emissions unit P901 is operating in the melting and refining period.

5. 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.

6. 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.

7. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any building openings housing this emissions unit. These building openings shall include, but not limited to, doorways, windows, and roof monitors. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. 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 4-30-99: Reporting Requirements 2 - 4. 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit to the Ohio EPA field 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.2. of this permit.

The permittee may request to Ohio EPA, NWDO 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.

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

4. 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 appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Hg, CO, PE, NOx, 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:

PE: Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
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;
OC: Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A;
SO2: Method 6 of 40 CFR, Part 60, Appendix A; and
Hg: Method 29 of 40 CFR, Part 60, Appendix A.

d. The test(s) for PE shall be conducted while emissions units P901, P902, P903 and P904 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

e. The test(s) for Hg shall be conducted while emissions units P901, P902 and P903 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. The tests for SO2, NOx, CO and OC shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. The tests may be conducted

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

Personnel from the appropriate Ohio EPA 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office.

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

2.a Emission Limitation:

0.0018 grain/dscf

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

2.b Emission Limitations:

15.6 lbs PE/hr and 68.2 tons PE/yr

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

The tons/yr emission limitation was developed by multiplying the pounds/hour 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.

V. Testing Requirements (continued)

2.c Emission Limitations:

0.95 lb PE/hr (fugitive) and 3.38 tons PE/yr (fugitive)

Applicable Compliance Method:
Compliance with the hourly allowable PE limitation may be determined by multiplying an emission factor of 0.6 lb PE/ton of steel by the maximum hourly steel production rate (158 tons steel/hr) and by a capture efficiency factor of (1 - .99).*

The permittee shall demonstrate compliance with the annual limitation by multiplying the above emission factor by the maximum steel refining (production) rate, and by a capture efficiency factor of (1 - .99)* and dividing by 2000.

* capture efficiency is assumed to be 98%

2.d Emission Limitations:

0.72 lb PM10/hr (fugitive) and 2.57 tons PM10/yr (fugitive)

Applicable Compliance Method:
Compliance with the hourly allowable PE limitation may be determined by multiplying an emission factor of 0.6 lb PE/ton of steel by the maximum hourly steel production rate (158 tons steel/hr) and by a capture efficiency factor of (1 - .99).** This result shall then be multiplied by the PM10 portion of PE (0.76).*

The permittee shall demonstrate compliance with the annual limitation by multiplying the above emission factor by the rolling 12-month steel refining (production) rate, and by a capture efficiency factor of (1 - .99)** and dividing by 2000. This result multiplied by the PM10 portion of PE (0.76)*.

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

2.e Emission Limitations:

78.8 lbs CO/hr and 281.3 tons CO/yr

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

The permittee shall demonstrate compliance with the annual limitation by multiplying the emission factor determined during the most recent testing (lbs CO/ton) by the maximum annual steel production rate and dividing by 2000.

2.f Emission Limitations:

4.73 lbs NOx/hr and 16.88 tons NOx/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly 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 shall demonstrate compliance with the annual limitation by multiplying the emission factor determined during the most recent testing (lbs NOx/ton) by the maximum annual steel production rate, and then dividing by 2000.

V. Testing Requirements (continued)

2.g Emission Limitations:

23.7 lbs SO2/hr and 84.38 tons SO2/yr

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

The permittee shall demonstrate compliance with the annual limitation by multiplying the emission factor determined during the most recent testing (lbs SO2/ton) by the maximum annual steel production rate, and then dividing by 2000.

2.h Emission Limitations:

0.31 lb Pb/hr and 1.36 tons Pb/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Pb emission limitation above by multiplying the hourly Pb rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Pb metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.i Emission Limitations:

0.38 lb Hg/hr and 0.17 tons Hg/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Hg emission limitation above by multiplying the hourly Hg rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Hg metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.j Emission Limitation:

0.44 lb Mg/hr and 1.91 tons Mg/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Mg emission limitation above by multiplying the hourly Mg rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Mg metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.

V. Testing Requirements (continued)

2.k Emission Limitation:

0.58 lb Mn/hr and 2.52 tons Mn/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Mn emission limitation above by multiplying the hourly Mn rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Mn metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.l Emission Limitation:

3.85 lbs Zn/hr and 16.85 tons Zn/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly Zn emission limitation above by multiplying the hourly Zn rate (based on the results of the stack testing required in section A.V.1. of this permit) by the weight percentage of Zn metal (determined in accordance with term and condition A.III.3. of this permit.

The annual emission limitation was developed by multiplying the hourly 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.m 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.

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

****

THIS IS THE LAST PAGE OF THE PERMIT

****