



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

08/07/06

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

03-26-00-0073
NorthStar Bluescope Steel LLC
Melissa Dotson
6767 County Road 9
P.O. Box 128
Delta, OH 43515

Dear Melissa Dotson:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Northwest District Office.

Sincerely,

Michael W. Ahern
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: Northwest District Office
File, DAPC PIER



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 08/07/06

Effective Date: 08/28/06

Expiration Date: 08/28/11

This document constitutes issuance of a Title V permit for Facility ID: 03-26-00-0073 to: NorthStar Bluescope Steel LLC 6767 County Road 9 Delta, OH 43515

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include F005 (Plant Roadways & Parking Areas), P001 (Tunnel Furnace), P002 (Heated Transfer Table), P003 (Finishing Mill), P004 (Ladle Preheat 1), P005 (Ladle Preheat 2), P006 (Ladle Preheat 3), P008 (Ladle Dryer 1), P009 (Ladle Dryer 2), P014 (Contact Cooling Towers), P015 (Cooling Tower #7), P901 (Electric Arc Shaft Furnace), P902 (Ladle Metallurgy Facility 1), and P903 (Ladle Metallurgy Facility 2).

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.

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

Handwritten signature of Joseph P. Koncelik

Joseph P. Koncelik
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c. The permittee shall submit required reports in the following manner:
- i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter (An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c)).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply

reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; General Terms and Conditions: A.2, A.3, A.4, A.6.e, A.7, A.12, A.14, A.18, A.19, A.20, and A.22 of Part I of this Title V permit, as well as any deviations from the requirements in Section A.V or A.VI of Part III of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable

requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in Part II.A of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))
- v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. **Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. **Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

4. **Title IV Provisions**

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

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

5. Severability Clause

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

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable upon final issuance of all applicable OAC Chapter 3745-35 operating permits and/or registrations for all subject emissions units located at the facility and:
 - i. the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - ii. the permittee no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - iii. a combination of i. and ii. above.

The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

7. Fees

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

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

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

11. Federal and State Enforceability

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

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

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

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

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides

the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

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

16. Off-Permit Changes

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

17. Compliance Method Requirements

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

18. Insignificant Activities or Emissions Levels

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent “modification” or “installation” as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an “emissions unit” as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

22. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii; or
- b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. Pursuant to 40 CFR Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units P901, P902, and P903 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

(Authority for term: 40 CFR Part 64)

2. 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);

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 the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and or 40 CR Part 60, Subpart AAa.

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirement (as defined in OAC rule 3745-77-01(H)), or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

Ladle Temp and AI Station (Z001);
Liquid Steel Decanting (Z002);
Ladle Rebuild Area (Z003);
Tundish De-Skull Stand (Z004);
Caster Parts Washer (Z005);
EAF Parts Washer (Z006);
Roughing Mill Parts Washer (Z007);
Finishing Mill Parts Washer (Z008);
Downcoiler Parts Washer (Z009);
Roll Shop Parts Washer (Z010);
Central Maintenance Parts Washer (Z011);
Caster Space Heater (Z012);
Finishing Mill Space Heater (Z013);
Roll Shop Space Heater (Z014);
Warehouse Space Heater (Z015);
Roughing Mill Space Heater (Z016);
Central Maint Space Heater (Z017); and
Finished Coil Marking (Z018).

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways, parking and storage areas (See Section A.1.2.c.)	OAC rule 3745-17-07(B)	none (See A.1.2.a.)
	OAC rule 3745-17-08(B)	none (See A.1.2.b.)
	OAC rule 3745-31-05 (PTI 03-9212, issued 11/28/00)	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.1.2.d.)	OAC rule 3745-17-07(B)	none (See A.1.2.a.)
	OAC rule 3745-17-08(B)	none (See A.1.2.b.)
	OAC rule 3745-31-05 (PTI 03-9212)	No visible PE, 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.1.2.a.)
	OAC rule 3745-17-08(B)	none (See A.1.2.b.)
	OAC rule 3745-31-05 (PTI 03-9212)	213.8 lbs PE/day (average)(See A.1.2.1.) 42.8 lbs PM10/day(average)(See A.1.2.1.)

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 equally effective 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 equally effective control measures to ensure compliance.

2.g The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2. Additional Terms and Conditions (continued)

- 2.h** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.i** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved public streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.j** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.k** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.l** The PE and PM10 emission limitations were established as average daily values [based on the annual vehicle miles traveled (VMT) divided by 365 days]. It is also assumed that 20% of the PE are PM10.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1.** Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #03-09212, issued on November 28, 2000: A.III.2., A.III.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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

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

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

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

4. The permittee shall maintain records of the following information:
- 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;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #03-9212, issued on April 30, 1999: A.V.2. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.
2. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.a Emission Limitation:

213.8 lbs PE/day (average)

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tunnel Furnace (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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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, 11/28/00)	1.13 lbs PE/hr 4.95 tons PE/yr
		0.068 lb sulfur dioxide (SO ₂)/hr 0.30 ton SO ₂ /yr
		22.6 lbs nitrogen oxides (NO _x)/hr 99.0 tons NO _x /yr
		7.91 lbs carbon monoxide (CO)/hr 34.7 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), 3745-17-07(A) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.b.

2. Additional Terms and Conditions

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

2. Additional Terms and Conditions (continued)

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

a. The emission testing shall be conducted within 6 months after issuance of the permit and within 12 months prior to permit expiration.

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

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

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

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

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

V. Testing Requirements (continued)

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Heated Transfer Table (P002)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas-fired heated transfer table (60 mmBtu/hr), with low NOx burners	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11	See A.I.2.a.
	OAC rule 3745-18-06(E)	See A.I.2.a
	OAC rule 3745-31-05 (PTI 03-9212, issued 11/28/00)	0.6 lb PE/hr 2.63 tons PE/yr
		0.036 lb sulfur dioxide (SO ₂)/hr 0.16 ton SO ₂ /yr
		9.0 lbs nitrogen oxides (NO _x)/hr 39.5 tons NO _x /yr
		4.2 lbs carbon monoxide (CO)/hr 18.4 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.

2. Additional Terms and Conditions

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

2. Additional Terms and Conditions (continued)

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- a. The emission testing shall be conducted within 6 months after issuance of the permit and within 12 months prior to permit expiration.

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

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

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

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

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

V. Testing Requirements (continued)

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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/mm³.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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NO_x 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Finishing Mill (P003)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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, issued 11/28/00	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.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

IV. Reporting Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- 1.a Emission Limitation: 2.2 lbs PE/hr

Applicable Compliance Method:

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

* milligrams to pounds conversion factor

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

Facility Name: **North Star BlueScope Steel, LLC**

Facility ID: **03-26-00-0073**

Emissions Unit: **Finishing Mill (P003)**

V. Testing Requirements (continued)

- 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).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle preheater #1	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212, issued 12/28/00)	0.06 lb PE/hr 0.26 ton PE/yr
		0.012 lb sulfur dioxide (SO ₂)/hr 0.053 ton SO ₂ /yr
		2.0 lbs nitrogen oxides (NO _x)/hr 8.76 tons NO _x /yr
		0.40 lb carbon monoxide (CO)/hr 1.75 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.
- 2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- 1.a** Emission Limitations: 2.0 lbs NO_x/hr and 8.76 tons NO_x/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NO_x 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 NO_x/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 NO_x emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle preheater #2	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212, issued 12/28/00)	0.06 lb PE/hr 0.26 ton PE/yr
		0.012 lb sulfur dioxide (SO ₂)/hr 0.053 ton SO ₂ /yr
		2.0 lbs nitrogen oxides (NO _x)/hr 8.76 tons NO _x /yr
		0.40 lb carbon monoxide (CO)/hr 1.75 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.
- 2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- 1.a** Emission Limitations: 2.0 lbs NO_x/hr and 8.76 tons NO_x/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NO_x 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 NO_x/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 NO_x emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle preheater #3	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212, issued 11/28/00)	0.05 lb PE/hr 0.21 ton PE/yr
		0.0096 lb sulfur dioxide (SO ₂)/hr 0.042 ton SO ₂ /yr
		1.6 lbs nitrogen oxides (NO _x)/hr 7.01 tons NO _x /yr
		0.32 lb carbon monoxide (CO)/hr 1.4 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B). See Section A.I.2.d.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.
- 2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- 1.a** Emission Limitations: 1.6 lbs NO_x/hr and 7.01 tons NO_x/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NO_x 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 NO_x/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 NO_x emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle dryer #1	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212, issued 12/28/00)	0.05 lb PE/hr 0.21 ton PE/yr
		0.0096 lb sulfur dioxide (SO ₂)/hr 0.042 ton SO ₂ /yr
		1.6 lbs nitrogen oxides (NO _x)/hr 7.01 tons NO _x /yr
		0.32 lb carbon monoxide (CO)/hr 1.4 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B). See Section A.I.2.d.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.
- 2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- 1.a** Emission Limitations: 1.6 lbs NO_x/hr and 7.01 tons NO_x/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NO_x 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 NO_x/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 NO_x emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle dryer #2	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11	See A.I.2.b.
	OAC rule 3745-18-06(E)	See A.I.2.c.
	OAC rule 3745-31-05 (PTI 03-9212, issued 11/28/00)	0.05 lb PE/hr 0.21 ton PE/yr
		0.0096 lb sulfur dioxide (SO ₂)/hr 0.042 ton SO ₂ /yr
		1.6 lbs nitrogen oxides (NO _x)/hr 7.01 tons NO _x /yr
		0.32 lb carbon monoxide (CO)/hr 1.4 tons CO/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See Section A.I.2.d.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Fulton County.
- 2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions (continued)

- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-9212.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements

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

- 1.a** Emission Limitations: 1.6 lbs NO_x/hr and 7.01 tons NO_x/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NO_x 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 NO_x/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 NO_x emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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

Applicable Compliance Method:

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

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

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation by using test Methods 1 - 4 and 6, which are located in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
contact cooling towers, with high efficiency mist eliminators	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	See A.I.2.a.
	OAC rule 3745-31-05 (PTI 03-9212, issued 11/28/00)	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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

IV. Reporting Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

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).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 9212]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cooling Tower #7 (P015)

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
cooling tower	OAC rule 3745-31-05 (A)(3) (PTI 03-17004, issued 12/20/05)	See Section A.I.2.b. 0.50 lb particulate emissions (PE)/hr & 2.2 tons PE/yr
	OAC rule 3745-17-11 (B)(4) OAC rule 3745-17-07 (A)(1)	See section A.2.c. Visible PE shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-31-10 through OAC rule 3745-31-20	See Section A.I.2.a.

2. Additional Terms and Conditions

- 2.a The permittee shall employ Best Available Control Technology (BACT) for controlling PE/PM10 on this emissions unit. The BACT requirements for this emissions unit has been determined to be use of high efficiency drift eliminators.
- 2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through OAC rule 3745-31-20, and OAC rule 3745-17-07 (A)(1).
- 2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall not exceed an average total dissolved solids content of 1,000 parts per million (ppm) in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03- 17004]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform the following monitoring requirements for emissions unit P015 on a weekly basis:
 - a. test and record the total dissolved solids content, in ppm*; and,
 - b. if monitored on a greater frequency, determine the average dissolved solids content, in ppm on a weekly basis.

* The permittee may measure conductivity in lieu of a direct measurement for dissolved solids content.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 17004]

IV. Reporting Requirements

1. In accordance with General Term and Condition A.1.c.iii. of this permit, the permittee shall submit quarterly deviation (excursion) reports in that identify all exceedances of the average total dissolved solids content of 1000 ppm.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 17004]

V. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

- a. Emission Limitation
0.50 lb PE/hr & 2.2 tons PE/yr

Applicable Compliance Method

The hourly allowable PE limitation was established by multiplying the maximum drift loss factor 0.005 percent by the maximum total dissolved solids content of 1,000 ppm, and then by a maximum flow rate of 1,200,000 gallons per hour for the cooling water. Therefore, provided compliance with the maximum allowable dissolved solids content is maintained, compliance with the hourly PE limitation shall be ensured.

If required, the permittee shall submit a testing proposal which shall demonstrate that the maximum drift loss does not exceed 0.005 percent.

As long as compliance with the hourly limitation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was determined by the multiplying the hourly limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000 lbs/ton).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 17004]

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

Applicable Compliance Method

Compliance with the visible emissions limitation shall be determined by OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03- 17004]

VI. Miscellaneous Requirements

1. none

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Electric Arc Shaft Furnace (P901)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
electric arc furnace, with baghouse (315 tons/hr)	OAC rule 3745-17-07(A)	See A.I.2.i.
	OAC rule 3745-17-11(B)(2)	See A.I.2.e.
	OAC rule 3745-18-06(E)	See A.I.2.e.
	OAC rule 3745-17-07(B)(1)	See A.I.2.h.
	OAC rule 3745-17-08(B)	See A.I.2.g.
	OAC rule 3745-21-08(B)	See A.I.2.k.
	OAC rule 3745-23-06(B)	See A.I.2.f.
	OAC rule 3745-31-05(A) (PTI 03-17004, issued 12/20/05)	See A.I.2.c.
	40 CFR, Part 60, Subpart AAa	See A.I.2.b.and A.I.2.d.
40 CFR, Part 64	See A.II.3, A.III.1-3, A.III.10-19, and A.IV.1-4.	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-10 through	See A.I.2.a. and A.I.2.j.
	OAC rule 3745-31-20	78.80 lbs Sulfur Dioxide (SO ₂) /hr, 345.1 tons SO ₂ /rolling 12-month period 179.60 lbs nitrogen oxides (NO _x)/hr, 786.7 tons NO _x /rolling 12-month period 2362.50 lbs Carbon Monoxide (CO)/hr, 10347.8 tons CO/rolling 12-month period 110.30 lbs Organic Compounds (OC)/hr, 483.1 tons OC/rolling 12-month period 0.0018 grains particulate matter less than 10 microns (PM ₁₀)/dscf, 88.1 tons PM ₁₀ /yr (Stack #1), See A.I.2.i. 0.10 lb Pb/hr, 0.44 tons Pb/yr (Baghouse #1 Stack) 0.050 lb Hg/hr, 0.22 ton Hg/yr (Baghouse #1 Stack) 0.0018 grains PM ₁₀ /dscf, 79.1 tons PM ₁₀ /yr (Baghouse #2 Stack), See A.I.2.i. 0.09 lb Pb/hr, 0.39 tons Pb/yr (Baghouse #2 Stack) 0.045 lb Hg/hr, 0.20 ton Hg/yr (Baghouse #2 Stack) 46.9 tons Particulate Emissions (PE)/rolling 12-month period (fugitive) 35.7 tons PM ₁₀ /rolling 12-month period (fugitive) 0.23 ton Pb/rolling 12-month period (fugitive) 0.12 ton Hg/rolling 12-month period (fugitive)

2. Additional Terms and Conditions

- 2.a** The permittee shall employ Best Available Control Technology (BACT) for controlling NO_x, SO₂, CO, PE/PM₁₀, Pb, Hg, and Volatile Organic Compounds (VOC)* from this emissions unit. BACT has been determined to be the following for each pollutant:
- i. PE/PM₁₀ - Operation of a control system consisting of two baghouses with an overall capture efficiency of 98% and a maximum outlet grain loading of 0.0018 grains /dscf.
 - ii. CO - The operation of a Direct Evacuation Control (DEC) system with air gap, and operation of a cooled post combustion chamber with burners that achieves an overall emission rate of 7.5 lbs of CO/ton of liquid steel produced.**
 - iii. NO_x - The operation of a Direct Evacuation Control (DEC) system with air gap, and operation of a cooled post combustion chamber with burners that achieves an overall emission rate of 0.57 lb of NO_x /ton of liquid steel produced.**
 - iv. SO₂ - The development maintenance, and process operations under a scrap management plan that achieves an overall emission rate of 0.25 lb of SO₂/ton of liquid steel produced.**
 - v. VOC - The development maintenance, and process operations under a scrap management plan that achieves an overall emission rate of 0.35 lb of VOC/ton of liquid steel produced.**
 - vi. Pb, Hg - Operation of a control system consisting of two baghouses with an overall capture efficiency of 98% and a maximum outlet grain loading of 0.0018 grains /dscf, and the development, maintenance, and operation under a scrap management plan.

* For the purposes of the BACT review, it was assumed all OC was VOC. The regulation of OC effectively regulates VOC.

** These emission rates are for emission units P901, P902, and P903, combined.

- 2.b** The permittee shall not cause to be discharged into the atmosphere any gasses which:
- i. exit from the baghouses controlling the EAF and exhibit 3% opacity or greater; and
 - ii. exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.
- 2.c** The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 60, Subpart AAa.
- 2.d** The standard for particulate matter specified by 40 CFR 60.272a(a)(1) is less stringent than the emission limit established pursuant to OAC rules 3745-31-10 through OAC rule 3745-31-20.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20.
- 2.f** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) by committing to comply with the BACT requirements established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20 in PTI 03-17004.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.g** This facility is not located within an "Appendix A" area as 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. Additional Terms and Conditions (continued)

- 2.h** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-08(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i** All particulate matter emitted is PM10.
- 2.j** The emission limitations established under this rule are for emissions units P901, P902, and P903, combined.
- 2.k** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the BACT requirements established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20 in PTI 03-17004.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.l** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart AAa.

II. Operational Restrictions

- 1.** The permittee shall limit production in emissions unit P901 to an average of 315 tons of liquid steel per hour. Annual production from emissions unit P901 shall not exceed 2.76 million tons of liquid steel per year, based upon a rolling, 12-month summation of the monthly liquid steel production.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]
- 2.** The permittee shall implement the following control practices:
- the post combustion chamber ignition burner set point shall be at a minimum of 1.0 MW (megawatt) during any EAF steel making operation;
 - the active EAF DEC offgas ignition burner set point shall be at a minimum of 1.0 MW during any EAF steel making operation; and,
 - the combustion air fan for the active EAF shell shall be set to ensure excess combustion air.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]
- 3.** The control system's fan motor amperes set points and damper positions shall be maintained within +/- 15% of the values established during the most recent emission testing that demonstrated the emissions unit was in compliance.
- [Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64, and PTI 03-17004]
- 4.** 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 Ohio EPA, NWDO and shall be viewed as part of the operational requirements for the permit. Any change to the "Scrap Management Program" that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by Ohio EPA, NWDO.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the visible emissions from the two baghouses controlling emissions units P901, P902, and P903. Observations of the opacity of the visible emissions from these control devices shall be performed by a certified visible emission observer as follows:
 - a. The permittee shall conduct visible emission observations on each control device in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Visible emission observations shall be conducted at least once per day when the furnace is operating in the melting and refining period. These observations shall be taken in accordance with Method 9 for at least three 6-minute periods.
 - c. 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 ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
 - e. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03- 17004]

2. The permittee shall monitor the operation of each control system and maintain records in accordance with the following requirements:
 - a. The permittee shall check and record on a once-per-shift basis the control system fan motor amperes and damper positions. The monitoring devices may be installed in any appropriate location such that reproducible monitoring will result. The Ohio EPA, NWDO may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60.
 - b. When the permittee is required to demonstrate compliance with the visible emission limitation in condition A.I.2.b. and at any other time, the Ohio EPA, NWDO may require that all control system fan motor amperes and damper positions be determined during all periods in which a hood is operated for the purpose of capturing emissions.
 - c. The permittee may petition the Ohio EPA, NWDO for reestablishment of these parameters whenever the permittee can demonstrate to the agency's satisfaction that the operating conditions upon which the parameters were previously established are no longer applicable. Operation at other than baseline values will be considered by the Ohio EPA to be unacceptable operation and maintenance of the control system.
 - d. 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). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, NWDO to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03- 17004]

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

3. Daily observations of the opacity of the visible emissions from the meltshop shall be performed by a certified visible emission observer as follows:
- a. The permittee shall conduct visible emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Shop opacity observations shall be conducted at least once when the furnace is operating in the melting and refining period.
 - c. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop. Shop opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of 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.
 - d. The permittee shall ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
 - e. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03-17004]

4. The permittee shall maintain on site a record of all baghouse dust analysis for both baghouses serving emissions units P901, P902, and P903. At a minimum, the analysis shall contain a record of the Pb content in percent by weight.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

5. The permittee shall maintain daily production records of the following for emissions unit P901:
- a. the number of hours of operation;
 - b. the tons of liquid steel produced; and,
 - c. the average hourly production rate (b divided by a).

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

6. The permittee shall maintain monthly records of the following for emissions unit P901, P902, and P903 combined:
- the tons of liquid steel produced;
 - the emissions* of SO₂, CO, OC, and NO_x, and the fugitive emissions**of PE, PM₁₀, Pb, and Hg;
 - of annual production of liquid steel, based on a rolling 12-month summation, and
 - the annual emissions of SO₂, CO, OC, NO_x, and the fugitive emissions of PE, PM₁₀, Pb, and Hg, based on a rolling 12-month summation.

* The permittee shall use the continuous monitoring requirements in condition A.III.9. to determine monthly CO emissions. For all other pollutants, the permittee shall use the emission factors established from the testing requirements in condition A.V.1.

** The fugitive PE emissions shall be calculated from the emission factors 1.4 pounds of PE per ton of steel produced for the EAF (emissions unit P901, with 98% capture) and 0.6 pound of PE per ton of steel produced for the Ladle Metallurgy Furnaces (LMFs, emissions units P902 and P903, with 99% capture) applied to the monthly production rates. Fugitive PM₁₀ shall be calculated assuming 76% by weight of all PE is PM₁₀. For fugitive Pb and Hg, the permittee shall calculate emissions by applying the weight percentages established by the most recent testing/analysis which has been performed for these metals.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

7. The permittee shall maintain monthly records of the following for emissions unit P901, P902, and P903 combined:
- the hours of operation;
 - the stack emissions* of PM₁₀, Pb, and Hg;
 - the annual stack emissions of PM₁₀, Pb, and Hg, based on a rolling 12-month summation.

* The permittee shall calculate the emission rates for each baghouse stack. For stack PM₁₀, the permittee shall use the hourly emission rates established in condition A.V.1. For stack Pb and Hg, the permittee shall calculate emissions by applying the weight percentages established by the most recent testing/analysis which has been performed for these metals.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

8. The permittee shall maintain daily records of all instances where the computer program for monitoring the set points established in condition A.II.2. above for emissions unit P901 required cessation of, or delays in, furnace operations. The records shall include the reasons for any delay and/or cessation in furnace operations, the duration, a description of the corrective actions taken, and a determination whether or not a malfunction resulting in a violation of a condition of the permit has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

9. The permittee shall operate and maintain equipment to continuously monitor and record CO from both exhaust systems serving this emissions unit, in the units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

10. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(b)]

11. The permittee shall maintain a supply of bags, or any other parts necessary to ensure that the collection/control system will operate properly. Any worn, clogged, or broken equipment should be replaced, or fixed within a reasonable timeframe.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(e)]

12. Within 180 days of the issuance of this permit, the permittee shall install, calibrate, maintain, and continuously operate a fabric filter bag leak detection system, in accordance with the system manufacturer's instructions, to monitor the baghouse performance. For this purpose, the term "fabric filter bag leak detection system" means a system that is capable of continuously monitoring relative particulate emissions (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate emissions loadings. The fabric filter bag leak detection system shall meet the following:

a. The fabric filter bag leak detection system must be certified by the manufacturer to be capable of detecting particulate emissions at concentrations that are equivalent, at the actual operating conditions of the melt shop baghouse, to 0.0018 grains per dry standard cubic foot or less.

b. The fabric filter bag leak detection system sensor must provide output of relative particulate emissions loading, and the permittee shall continuously record the output signal from the sensor.

c. The fabric filter bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate emissions loading is detected over a preset level, and the alarm must be located such that it can be heard by the appropriate plant personnel.

d. The initial adjustment of the fabric filter bag leak detection system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time except as detailed in the operations, maintenance, and monitoring plan. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

e. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

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

13. If the fabric filter bag leak detection system alarms, the permittee shall initiate investigation of the melt shop baghouse within 1 hour of the first discovery of the alarming incident for possible corrective action. If corrective action is required, the permittee shall proceed to implement such corrective action, in accordance with a written corrective action plan, as soon as practicable in order to minimize possible exceedances of the emission limitations established in Section A.I. The corrective action plan shall include, at a minimum, the following provisions:
- a. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
 - b. Sealing off defective bags or filter media.
 - c. Replacing defective bags or filter media, or otherwise repairing the control device.
 - d. Sealing off a defective baghouse compartment.
 - e. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
 - f. Shutting down the melt shop operations, including the electric arc shaft furnace.

The permittee shall maintain records of each bag leak detection system alarm, including the date and time of the alarm, the amount of time taken for corrective action to be initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

14. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

15. The permittee shall maintain records of all inspections and maintenance performed on the fabric filter bag leak detection system. Records shall include the date and time of each inspection or maintenance activity; the activities performed; and the results of any drift checks and response tests.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

16. At least once per week, the permittee shall confirm that dust is being removed from the melt shop baghouse hoppers through visual inspection or equivalent means of ensuring the proper functioning of removal mechanisms.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

17. At least once per month, the permittee shall perform a check of the bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

18. After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(e)]

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

19. The CAM plan for this emissions unit has been developed for PE. The CAM performance indicators for the baghouse controlling this emissions unit are opacity monitoring of the baghouse, fan motor amperage on the collection system and operating a fabric filter bag leak detection system. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.3 below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. Fan motor amperage operating parameters will be re-verified through periodic emission testing. In addition to opacity monitoring and periodic monitoring of the operating parameters and operating a fabric filter bag leak detection system, the permittee also has an inspection/preventative maintenance program for the baghouse and capture system. Based on the results of the inspection/preventative maintenance program, repairs to the baghouse and capture system shall be made as needed. If the current CAM indicators and/or the baghouse and capture system inspection/preventative maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.7(d) and 40 CFR Part 64.8]

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- all exceedance of the production restrictions contained in condition A.II.1.;
 - all exceedance of the rolling, 12-month emission limitations specified in condition A.I.1. of this permit;
 - all periods of time during which the control system's set points did not comply with the values established in condition A.II.2;
 - all periods of time during which any of the control system fan motor ampere values or damper positions did not comply with the values established pursuant to condition A.II.3; and
 - all periods of time during which the scrap was not handled in accordance with the permittee's "Scrap Management Program."

The permittee shall submit these deviation reports in accordance with General Term and Condition A.1.c.iii. of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.7(d), 40 CFR Part 64.9(a) and PTI 03- 17004]

2. The permittee shall submit a semiannual written report of all exceedances of the opacity restrictions contained in condition A.I.2.b. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limits. If no deviations occurred during the reporting period, the permittee shall submit a report which states that no deviations occurred. These reports shall be submitted by January 31st and July 31st of each year and shall cover the previous six month period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.7(d), 40 CFR Part 64.9(a) and PTI 03- 17004]

3. If the results of monitoring or record keeping data indicate that the particulates emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a)]

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All periods of time in which the bag leak detection alarm system was triggered.
 - b. All periods of time (including the date) in which the permittee did not initiate corrective actions, as defined in the CAM plan, within 1 hour of an alarm from the bag leak detection system.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.9]

5.
 - a. Pursuant to and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any limitations specified in the terms and conditions of this permit. These reports shall also contain the total CO emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
 - d. Pursuant to and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60 section 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

V. Testing Requirements

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

V. Testing Requirements (continued)

- a. The emission testing shall be conducted in accordance with the time frames specified in PTI# 03-17004 (issued 12/20/05), and within 12 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x, CO, SO₂, OC, and Hg, the allowable outlet grain loadings for PM₁₀, and the opacity requirements specified in A.I.2.b.i. and A.I.2.b.ii. The mass emission testing shall also be used to demonstrate compliance with the lb/ton of liquid steel emission rates established in condition A.I.2.a.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; for SO₂, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for PM₁₀, Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M, for OC, Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR, Part 60, Appendix A; for Hg*, Methods 1 through 5 and 29 of 40 CFR, Part 60, Appendix A; and for opacity, Method 9 of 40 CFR, Part 60, Appendix A. During the initial compliance demonstration, testing for NO_x, CO, SO₂, and OC must be performed on both baghouses simultaneously. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. During the performance testing to demonstrate compliance with the outlet grain loading for PM₁₀, and the opacity requirements, the following additional testing requirements shall be employed:
 - i. The sampling time and sample volume for each Method 201 run shall be at least 4 hours and 4.50 dscm (160 dscf) and the sampling time shall include an integral number of heats.
 - ii. Opacity measurements shall be taken concurrently with each Method 201 run.
 - iii. The test runs shall be conducted concurrently, unless inclement weather interferes.
 - iv. The permittee shall obtain and record the following information:
 - (a) all control system fan motor amperes and damper positions during all periods in which a hood is operated for the purpose of capturing emissions from the EAF's;
 - (b) charge weights and materials and tap weights and materials;
 - (c) heat times, including start and stop times, and a log of process operation, including periods of no operation during testing; and
 - (d) control device operation log.
- e. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- f. Except as specified in condition A.V.1.d., the sampling time for each run shall be 8 hours in duration.

V. Testing Requirements (continued)

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

h. Personnel from the Ohio EPA 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.

i. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA NWDO.

* As part of the testing for Hg the permittee shall determine the weight percentages of Hg as compared to PM10, and the total mass emission rate for PM10. Testing for Hg shall be performed under "worst case" conditions.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

2.a Emission Limitation:
78.80 lbs SO₂ /hr, 0.25 lb of SO₂ /ton of liquid steel produced
179.60 lbs NO_x/hr, 0.57 lb of NO_x /ton of liquid steel produced
2362.50 lbs CO/hr, 7.5 lbs of CO/ton of liquid steel produced
110.30 lbs OC/hr, 0.35 lb of VOC/ton of liquid steel produced

Applicable Compliance Method:

Compliance with the hourly CO mass emission limitations shall be determined in accordance with the test methods and procedures specified in condition A.V.1. and the monitoring requirements specified in condition A.III.9. Compliance with the other mass emission limitations and lbs/ton of liquid steel produced limitations shall be determined in accordance with the test methods and procedures specified in condition A.V.1.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

2.b Emission Limitation:
Baghouse #1 Stack Emissions
0.0018 grains PM10/dscf, 88.1 tons PM10/rolling 12-month period
0.10 lb Pb/hr, 0.44 tons Pb/rolling 12-month period
0.050 lb Hg/hr, 0.22 ton Hg/rolling 12-month period

Baghouse #2 Stack Emissions

0.0018 grains PM10/dscf, 79.1 tons PM10/rolling 12-month period
0.09 lb Pb/hr, 0.39 tons Pb/rolling 12-month period
0.045 lb Hg/hr, 0.20 ton Hg/rolling 12-month period

Applicable Compliance Method:

Compliance with the allowable outlet grain loading and the hourly mass emission limitations for Hg shall be determined in accordance with the test methods and procedures specified in condition A.V.1. The stack Pb emissions were established based on a maximum weight percentage of the PM10 limit of 0.5% for Pb and will be verified in accordance with the analysis specified in condition A.III.4. Compliance with the annual emission limitations shall be determined in accordance with record keeping procedures specified in condition A.III.7.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

V. Testing Requirements (continued)

- 2.c** Emission Limitation:
345.1 tons SO₂/rolling 12-month period
786.7 tons NO_x/rolling 12-month period
10347.8 tons CO/rolling 12-month period
483.1 tons OC/rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined in accordance with record keeping procedures specified in condition A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

- 2.d** Emission Limitation:
Fugitive Emissions
46.9 tons PE/rolling 12-month period
35.7 tons PM₁₀/rolling 12-month period
0.23 ton Pb/rolling 12-month period
0.12 ton Hg/rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined in accordance with the record keeping procedures specified in condition A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

- 2.e** Emission Limitation:
The permittee shall not cause to be discharged into the atmosphere any gasses which exit from the stack of the baghouse controlling the EAF and exhibit 3% opacity or greater; and

Applicable Compliance Method:

Compliance with the opacity limitation shall be determined in accordance with record keeping procedures specified in condition A.III.1.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

- 2.f** Emission Limitation:
The permittee shall not cause to be discharged into the atmosphere any gasses which exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.

Applicable Compliance Method:

Compliance with the opacity limitation shall be determined in accordance with record keeping procedures specified in condition A.III.3.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

VI. Miscellaneous Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

VI. Miscellaneous Requirements (continued)

2. The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring systems designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

4. Prior to the installation of the new continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 and 6 for approval by the Ohio EPA, Central Office.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

5. Within 180 days of the installation of the second baghouse controlling this emissions unit, the permittee shall conduct certification tests of the new continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4 and 6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The Permit to Install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the Permit to Install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the Permit to Install application and the Screen3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the Screen3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Manganese
 TLV (mg/m3): 200
 Maximum Hourly Emission Rate (lbs/hr): 1.13
 Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 2.08
 MAGLC (mg/m3): 4.76

Pollutant: Zinc
 TLV (mg/m3): 2000
 Maximum Hourly Emission Rate (lbs/hr): 21.0
 Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 38.7
 MAGLC (mg/m3): 47.6

- Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- 2.a** changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 2.b** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- 2.c** physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- 3.** The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle metallurgy furnace #1, with baghouse (315 tons/hr)	OAC rule 3745-17-07(A)	See A.I.2.i.
	OAC rule 3745-17-11(B)(2)	See A.I.2.e.
	OAC rule 3745-18-06(E)	See A.I.2.e.
	OAC rule 3745-17-07(B)(1)	See A.I.2.h.
	OAC rule 3745-17-08(B)	See A.I.2.g.
	OAC rule 3745-21-08(B)	See A.I.2.k.
	OAC rule 3745-23-06(B)	See A.I.2.f.
	OAC rule 3745-31-05(A) (PTI 03-17004, issued 12/20/05)	See A.I.2.c.
	40 CFR, Part 60, Subpart AAa	See A.I.2.b.and A.I.2.d.
40 CFR, Part 64	See A.II.3, A.III.1-3, A.III.10-13., and A.IV.1-3.	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-10 through	See A.I.2.a. and A.I.2.j.
	OAC rule 3745-31-20	78.80 lbs Sulfur Dioxide (SO ₂) /hr, 345.1 tons SO ₂ /rolling 12-month period 179.60 lbs nitrogen oxides (NO _x)/hr, 786.7 tons NO _x /rolling 12-month period 2362.50 lbs Carbon Monoxide (CO)/hr, 10347.8 tons CO/rolling 12-month period 110.30 lbs Organic Compounds (OC)/hr, 483.1 tons OC/rolling 12-month period 0.0018 grains particulate matter less than 10 microns (PM ₁₀)/dscf, 88.1 tons PM ₁₀ /yr (Stack #1), See A.I.2.i. 0.10 lb Pb/hr, 0.44 tons Pb/yr (Baghouse #1 Stack) 0.050 lb Hg/hr, 0.22 ton Hg/yr (Baghouse #1 Stack) 0.0018 grains PM ₁₀ /dscf, 79.1 tons PM ₁₀ /yr (Baghouse #2 Stack), See A.I.2.i. 0.09 lb Pb/hr, 0.39 tons Pb/yr (Baghouse #2 Stack) 0.045 lb Hg/hr, 0.20 ton Hg/yr (Baghouse #2 Stack) 46.9 tons Particulate Emissions (PE)/rolling 12-month period (fugitive) 35.7 tons PM ₁₀ /rolling 12-month period (fugitive) 0.23 ton Pb/rolling 12-month period (fugitive) 0.12 ton Hg/rolling 12-month period (fugitive)

2. Additional Terms and Conditions

- 2.a** The permittee shall employ Best Available Control Technology (BACT) for controlling NO_x, SO₂, CO, PE/PM₁₀, Pb, Hg, and Volatile Organic Compounds (VOC)* from this emissions unit. BACT has been determined to be the following for each pollutant:
- i. PE/PM₁₀ - Operation of a control system consisting of two baghouses with an overall capture efficiency of 98% and a maximum outlet grain loading of 0.0018 grains /dscf.
 - ii. CO - The operation of a Direct Evacuation Control (DEC) system with air gap, and operation of a cooled post combustion chamber with burners that achieves an overall emission rate of 7.5 lbs of CO/ton of liquid steel produced.**
 - iii. NO_x - The operation of a Direct Evacuation Control (DEC) system with air gap, and operation of a cooled post combustion chamber with burners that achieves an overall emission rate of 0.57 lb of NO_x /ton of liquid steel produced.**
 - iv. SO₂ - The development maintenance, and process operations under a scrap management plan that achieves an overall emission rate of 0.25 lb of SO₂/ton of liquid steel produced.**
 - v. VOC - The development maintenance, and process operations under a scrap management plan that achieves an overall emission rate of 0.35 lb of VOC/ton of liquid steel produced.**
 - vi. Pb, Hg - Operation of a control system consisting of two baghouses with an overall capture efficiency of 98% and a maximum outlet grain loading of 0.0018 grains /dscf, and the development, maintenance, and operation under a scrap management plan.

* For the purposes of the BACT review, it was assumed all OC was VOC. The regulation of OC effectively regulates VOC.

** These emission rates are for emission units P901, P902, and P903, combined.

- 2.b** The permittee shall not cause to be discharged into the atmosphere any gasses which:
- i. exit from the baghouses controlling the EAF and exhibit 3% opacity or greater; and
 - ii. exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.
- 2.c** The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 60, Subpart AAa.
- 2.d** The standard for particulate matter specified by 40 CFR 60.272a(a)(1) is less stringent than the emission limit established pursuant to OAC rules 3745-31-10 through OAC rule 3745-31-20.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20.
- 2.f** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) by committing to comply with the BACT requirements established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20 in PTI 03-17004.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.g** This facility is not located within an "Appendix A" area as 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. Additional Terms and Conditions (continued)

- 2.h** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-08(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i** All particulate matter emitted is PM10.
- 2.j** The emission limitations established under this rule are for emissions units P901, P902, and P903 combined.
- 2.k** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the BACT requirements established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20 in PTI 03-17004.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.l** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart AAa.

II. Operational Restrictions

- 1.** The permittee shall limit production in emissions unit P901 to an average of 315 tons of liquid steel per hour. Annual production from emissions unit P901 shall not exceed 2.76 million tons of liquid steel per year, based upon a rolling, 12-month summation of the monthly liquid steel production.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]
- 2.** The permittee shall implement the following control practices:
- the post combustion chamber ignition burner set point shall be at a minimum of 1.0 MW (megawatt) during any EAF steel making operation;
 - the active EAF DEC offgas ignition burner set point shall be at a minimum of 1.0 MW during any EAF steel making operation; and,
 - the combustion air fan for the active EAF shell shall be set to ensure excess combustion air.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]
- 3.** The control system's fan motor amperes set points and damper positions shall be maintained within +/- 15% of the values established during the most recent emission testing that demonstrated the emissions unit was in compliance.
- [Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64, and PTI 03-17004]
- 4.** 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 Ohio EPA, NWDO and shall be viewed as part of the operational requirements for the permit. Any change to the "Scrap Management Program" that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by Ohio EPA, NWDO.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the visible emissions from the two baghouses controlling emissions units P901, P902, and P903. Observations of the opacity of the visible emissions from these control devices shall be performed by a certified visible emission observer as follows:
 - a. The permittee shall conduct visible emission observations on each control device in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Visible emission observations shall be conducted at least once per day when the furnace is operating in the melting and refining period. These observations shall be taken in accordance with Method 9 for at least three 6-minute periods.
 - c. 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 ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
 - e. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03- 17004]

2. The permittee shall monitor the operation of each control system and maintain records in accordance with the following requirements:
 - a. The permittee shall check and record on a once-per-shift basis the control system fan motor amperes and damper positions. The monitoring devices may be installed in any appropriate location such that reproducible monitoring will result. The Ohio EPA, NWDO may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60.
 - b. When the permittee is required to demonstrate compliance with the visible emission limitation in condition A.1.2.b. and at any other time, the Ohio EPA, NWDO may require that all control system fan motor amperes and damper positions be determined during all periods in which a hood is operated for the purpose of capturing emissions.
 - c. The permittee may petition the Ohio EPA, NWDO for reestablishment of these parameters whenever the permittee can demonstrate to the agency's satisfaction that the operating conditions upon which the parameters were previously established are no longer applicable. Operation at other than baseline values will be considered by the Ohio EPA to be unacceptable operation and maintenance of the control system.
 - d. 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). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, NWDO to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03- 17004]

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

3. Daily observations of the opacity of the visible emissions from the meltshop shall be performed by a certified visible emission observer as follows:
- The permittee shall conduct visible emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - Shop opacity observations shall be conducted at least once when the furnace is operating in the melting and refining period.
 - Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop. Shop opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of 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 ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
 - The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03-17004]

4. The permittee shall maintain on site a record of all baghouse dust analysis for both baghouses serving emissions units P901, P902, and P903. At a minimum, the analysis shall contain a record of the Pb content in percent by weight.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

5. The permittee shall maintain daily production records of the following for emissions unit P901:
- the number of hours of operation;
 - the tons of liquid steel produced; and,
 - the average hourly production rate (b divided by a).

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

6. The permittee shall maintain monthly records of the following for emissions unit P901, P902, and P903 combined:
- the tons of liquid steel produced;
 - the emissions* of SO₂, CO, OC, and NO_x, and the fugitive emissions**of PE, PM₁₀, Pb, and Hg;
 - of annual production of liquid steel, based on a rolling 12-month summation, and
 - the annual emissions of SO₂, CO, OC, NO_x, and the fugitive emissions of PE, PM₁₀, Pb, and Hg, based on a rolling 12-month summation.

* The permittee shall use the continuous monitoring requirements in condition A.III.9. to determine monthly CO emissions. For all other pollutants, the permittee shall use the emission factors established from the testing requirements in condition A.V.1.

** The fugitive PE emissions shall be calculated from the emission factors 1.4 pounds of PE per ton of steel produced for the EAF (emissions unit P901, with 98% capture) and 0.6 pound of PE per ton of steel produced for the Ladle Metallurgy Furnaces (LMFs, emissions units P902 and P903, with 99% capture) applied to the monthly production rates. Fugitive PM₁₀ shall be calculated assuming 76% by weight of all PE is PM₁₀. For fugitive Pb and Hg, the permittee shall calculate emissions by applying the weight percentages established by the most recent testing/analysis which has been performed for these metals.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

7. The permittee shall maintain monthly records of the following for emissions unit P901, P902, and P903 combined:
- the hours of operation;
 - the stack emissions* of PM₁₀, Pb, and Hg;
 - the annual stack emissions of PM₁₀, Pb, and Hg, based on a rolling 12-month summation.

* The permittee shall calculate the emission rates for each baghouse stack. For stack PM₁₀, the permittee shall use the hourly emission rates established in condition A.V.1. For stack Pb and Hg, the permittee shall calculate emissions by applying the weight percentages established by the most recent testing/analysis which has been performed for these metals.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

8. The permittee shall maintain daily records of all instances where the computer program for monitoring the set points established in condition A.II.2. above for emissions unit P901 required cessation of, or delays in, furnace operations. The records shall include the reasons for any delay and/or cessation in furnace operations, the duration, a description of the corrective actions taken, and a determination whether or not a malfunction resulting in a violation of a condition of the permit has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

9. The permittee shall operate and maintain equipment to continuously monitor and record CO from both exhaust systems serving this emissions unit, in the units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

10. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(b)]

11. The permittee shall maintain a supply of bags, or any other parts necessary to ensure that the collection/control system will operate properly. Any worn, clogged, or broken equipment should be replaced, or fixed within a reasonable timeframe.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(e)]

12. Within 180 days of the issuance of this permit, the permittee shall install, calibrate, maintain, and continuously operate a fabric filter bag leak detection system, in accordance with the system manufacturer's instructions, to monitor the baghouse performance. For this purpose, the term "fabric filter bag leak detection system" means a system that is capable of continuously monitoring relative particulate emissions (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate emissions loadings. The fabric filter bag leak detection system shall meet the following:

a. The fabric filter bag leak detection system must be certified by the manufacturer to be capable of detecting particulate emissions at concentrations that are equivalent, at the actual operating conditions of the melt shop baghouse, to 0.0018 grains per dry standard cubic foot or less.

b. The fabric filter bag leak detection system sensor must provide output of relative particulate emissions loading, and the permittee shall continuously record the output signal from the sensor.

c. The fabric filter bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate emissions loading is detected over a preset level, and the alarm must be located such that it can be heard by the appropriate plant personnel.

d. The initial adjustment of the fabric filter bag leak detection system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time except as detailed in the operations, maintenance, and monitoring plan. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

e. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

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

13. If the fabric filter bag leak detection system alarms, the permittee shall initiate investigation of the melt shop baghouse within 1 hour of the first discovery of the alarming incident for possible corrective action. If corrective action is required, the permittee shall proceed to implement such corrective action, in accordance with a written corrective action plan, as soon as practicable in order to minimize possible exceedances of the emission limitations established in Section A.I. The corrective action plan shall include, at a minimum, the following provisions:
- a. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
 - b. Sealing off defective bags or filter media.
 - c. Replacing defective bags or filter media, or otherwise repairing the control device.
 - d. Sealing off a defective baghouse compartment.
 - e. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
 - f. Shutting down the melt shop operations, including the electric arc shaft furnace.

The permittee shall maintain records of each bag leak detection system alarm, including the date and time of the alarm, the amount of time taken for corrective action to be initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

14. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

15. The permittee shall maintain records of all inspections and maintenance performed on the fabric filter bag leak detection system. Records shall include the date and time of each inspection or maintenance activity; the activities performed; and the results of any drift checks and response tests.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

16. At least once per week, the permittee shall confirm that dust is being removed from the melt shop baghouse hoppers through visual inspection or equivalent means of ensuring the proper functioning of removal mechanisms.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

17. At least once per month, the permittee shall perform a check of the bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

18. After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(e)]

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

19. The CAM plan for this emissions unit has been developed for PE. The CAM performance indicators for the baghouse controlling this emissions unit are opacity monitoring of the baghouse, fan motor amperage on the collection system and and operating a fabric filter bag leak detection system. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.3 below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. Fan motor amperage operating parameters will be re-verified through periodic emission testing. In addition to opacity monitoring and periodic monitoring of the operating parameters and operating a fabric filter bag leak detection system, the permittee also has an inspection/preventative maintenance program for the baghouse and capture system. Based on the results of the inspection/preventative maintenance program, repairs to the baghouse and capture system shall be made as needed. If the current CAM indicators and/or the baghouse and capture system inspection/preventative maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.7(d) and 40 CFR Part 64.8]

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- all exceedance of the production restrictions contained in condition A.II.1.;
 - all exceedance of the rolling, 12-month emission limitations specified in condition A.I.1. of this permit;
 - all periods of time during which the control system's set points did not comply with the values established in condition A.II.2;
 - all periods of time during which any of the control system fan motor ampere values or damper positions did not comply with the values established pursuant to condition A.II.3; and
 - all periods of time during which the scrap was not handled in accordance with the permittee's "Scrap Management Program."

The permittee shall submit these deviation reports in accordance with General Term and Condition A.1.c.iii. of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.7(d), 40 CFR Part 64.9(a) and PTI 03- 17004]

2. The permittee shall submit a semiannual written report of all exceedances of the opacity restrictions contained in condition A.I.2.b. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limits. If no deviations occurred during the reporting period, the permittee shall submit a report which states that no deviations occurred. These reports shall be submitted by January 31st and July 31st of each year and shall cover the previous six month period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.7(d), 40 CFR Part 64.9(a) and PTI 03- 17004]

3. If the results of monitoring or record keeping data indicate that the particulates emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a)]

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All periods of time in which the bag leak detection alarm system was triggered.
 - b. All periods of time (including the date) in which the permittee did not initiate corrective actions, as defined in the CAM plan, within 1 hour of an alarm from the bag leak detection system.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.9]

5.
 - a. Pursuant to and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any limitations specified in the terms and conditions of this permit. These reports shall also contain the total CO emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
 - d. Pursuant to and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60 section 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

V. Testing Requirements

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

V. Testing Requirements (continued)

- a. The emission testing shall be conducted in accordance with the time frames specified in PTI# 03-17004 (issued 12/20/05), and within 12 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x, CO, SO₂, OC, and Hg, the allowable outlet grain loadings for PM₁₀, and the opacity requirements specified in A.I.2.b.i. and A.I.2.b.ii. The mass emission testing shall also be used to demonstrate compliance with the lb/ton of liquid steel emission rates established in condition A.I.2.a.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; for SO₂, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for PM₁₀, Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M, for OC, Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR, Part 60, Appendix A; for Hg*, Methods 1 through 5 and 29 of 40 CFR, Part 60, Appendix A; and for opacity, Method 9 of 40 CFR, Part 60, Appendix A. During the initial compliance demonstration, testing for NO_x, CO, SO₂, and OC must be performed on both baghouses simultaneously. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. During the performance testing to demonstrate compliance with the outlet grain loading for PM₁₀, and the opacity requirements, the following additional testing requirements shall be employed:
 - i. The sampling time and sample volume for each Method 201 run shall be at least 4 hours and 4.50 dscm (160 dscf) and the sampling time shall include an integral number of heats.
 - ii. Opacity measurements shall be taken concurrently with each Method 201 run.
 - iii. The test runs shall be conducted concurrently, unless inclement weather interferes.
 - iv. The permittee shall obtain and record the following information:
 - (a) all control system fan motor amperes and damper positions during all periods in which a hood is operated for the purpose of capturing emissions from the EAF's;
 - (b) charge weights and materials and tap weights and materials;
 - (c) heat times, including start and stop times, and a log of process operation, including periods of no operation during testing; and
 - (d) control device operation log.
- e. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- f. Except as specified in condition A.V.1.d., the sampling time for each run shall be 8 hours in duration.

V. Testing Requirements (continued)

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

h. Personnel from the Ohio EPA 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.

i. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA NWDO.

* As part of the testing for Hg the permittee shall determine the weight percentages of Hg as compared to PM10, and the total mass emission rate for PM10. Testing for Hg shall be performed under "worst case" conditions.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

2.a Emission Limitation:
78.80 lbs SO₂ /hr, 0.25 lb of SO₂ /ton of liquid steel produced
179.60 lbs NO_x/hr, 0.57 lb of NO_x /ton of liquid steel produced
2362.50 lbs CO/hr, 7.5 lbs of CO/ton of liquid steel produced
110.30 lbs OC/hr, 0.35 lb of VOC/ton of liquid steel produced

Applicable Compliance Method:

Compliance with the hourly CO mass emission limitations shall be determined in accordance with the test methods and procedures specified in condition A.V.1. and the monitoring requirements specified in condition A.III.9. Compliance with the other mass emission limitations and lbs/ton of liquid steel produced limitations shall be determined in accordance with the test methods and procedures specified in condition A.V.1.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

2.b Emission Limitation:
Baghouse #1 Stack Emissions
0.0018 grains PM10/dscf, 88.1 tons PM10/rolling 12-month period
0.10 lb Pb/hr, 0.44 tons Pb/rolling 12-month period
0.050 lb Hg/hr, 0.22 ton Hg/rolling 12-month period

Baghouse #2 Stack Emissions

0.0018 grains PM10/dscf, 79.1 tons PM10/rolling 12-month period
0.09 lb Pb/hr, 0.39 tons Pb/rolling 12-month period
0.045 lb Hg/hr, 0.20 ton Hg/rolling 12-month period

Applicable Compliance Method:

Compliance with the allowable outlet grain loading and the hourly mass emission limitations for Hg shall be determined in accordance with the test methods and procedures specified in condition A.V.1. The stack Pb emissions were established based on a maximum weight percentage of the PM10 limit of 0.5% for Pb and will be verified in accordance with the analysis specified in condition A.III.4. Compliance with the annual emission limitations shall be determined in accordance with record keeping procedures specified in condition A.III.7.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

V. Testing Requirements (continued)

- 2.c** Emission Limitation:
345.1 tons SO₂/rolling 12-month period
786.7 tons NO_x/rolling 12-month period
10347.8 tons CO/rolling 12-month period
483.1 tons OC/rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined in accordance with record keeping procedures specified in condition A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

- 2.d** Emission Limitation:
Fugitive Emissions
46.9 tons PE/rolling 12-month period
35.7 tons PM₁₀/rolling 12-month period
0.23 ton Pb/rolling 12-month period
0.12 ton Hg/rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined in accordance with the record keeping procedures specified in condition A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

- 2.e** Emission Limitation:
The permittee shall not cause to be discharged into the atmosphere any gasses which exit from the stack of the baghouse controlling the EAF and exhibit 3% opacity or greater; and

Applicable Compliance Method:

Compliance with the opacity limitation shall be determined in accordance with record keeping procedures specified in condition A.III.1.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

- 2.f** Emission Limitation:
The permittee shall not cause to be discharged into the atmosphere any gasses which exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.

Applicable Compliance Method:

Compliance with the opacity limitation shall be determined in accordance with record keeping procedures specified in condition A.III.3.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

VI. Miscellaneous Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

VI. Miscellaneous Requirements (continued)

2. The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring systems designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

4. Prior to the installation of the new continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 and 6 for approval by the Ohio EPA, Central Office.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

5. Within 180 days of the installation of the second baghouse controlling this emissions unit, the permittee shall conduct certification tests of the new continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4 and 6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The Permit to Install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the Permit to Install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the Permit to Install application and the Screen3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the Screen3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Manganese
 TLV (mg/m3): 200
 Maximum Hourly Emission Rate (lbs/hr): 1.13
 Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 2.08
 MAGLC (mg/m3): 4.76

Pollutant: Zinc
 TLV (mg/m3): 2000
 Maximum Hourly Emission Rate (lbs/hr): 21.0
 Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 38.7
 MAGLC (mg/m3): 47.6

- Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- 2.a** changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 2.b** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- 2.c** physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- 3.** The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle metallurgy furnace #2, with baghouse (315 tons/hr)	OAC rule 3745-17-07(A)	See A.I.2.i.
	OAC rule 3745-17-11(B)(2)	See A.I.2.e.
	OAC rule 3745-18-06(E)	See A.I.2.e.
	OAC rule 3745-17-07(B)(1)	See A.I.2.h.
	OAC rule 3745-17-08(B)	See A.I.2.g.
	OAC rule 3745-21-08(B)	See A.I.2.k.
	OAC rule 3745-23-06(B)	See A.I.2.f.
	OAC rule 3745-31-05(A) (PTI 03-17004, issued 12/20/05)	See A.I.2.c.
	40 CFR, Part 60, Subpart AAa	See A.I.2.b.and A.I.2.d.
40 CFR, Part 64	See A.II.3, A.III.1-3, A.III.10-13., and A.IV.1-3.	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-10 through	See A.I.2.a. and A.I.2.j.
	OAC rule 3745-31-20	78.80 lbs Sulfur Dioxide (SO ₂) /hr, 345.1 tons SO ₂ /rolling 12-month period 179.60 lbs nitrogen oxides (NO _x)/hr, 786.7 tons NO _x /rolling 12-month period 2362.50 lbs Carbon Monoxide (CO)/hr, 10347.8 tons CO/rolling 12-month period 110.30 lbs Organic Compounds (OC)/hr, 483.1 tons OC/rolling 12-month period 0.0018 grains particulate matter less than 10 microns (PM ₁₀)/dscf, 88.1 tons PM ₁₀ /yr (Stack #1), See A.I.2.i. 0.10 lb Pb/hr, 0.44 tons Pb/yr (Baghouse #1 Stack) 0.050 lb Hg/hr, 0.22 ton Hg/yr (Baghouse #1 Stack) 0.0018 grains PM ₁₀ /dscf, 79.1 tons PM ₁₀ /yr (Baghouse #2 Stack), See A.I.2.i. 0.09 lb Pb/hr, 0.39 tons Pb/yr (Baghouse #2 Stack) 0.045 lb Hg/hr, 0.20 ton Hg/yr (Baghouse #2 Stack) 46.9 tons Particulate Emissions (PE)/rolling 12-month period (fugitive) 35.7 tons PM ₁₀ /rolling 12-month period (fugitive) 0.23 ton Pb/rolling 12-month period (fugitive) 0.12 ton Hg/rolling 12-month period (fugitive)

2. Additional Terms and Conditions

- 2.a** The permittee shall employ Best Available Control Technology (BACT) for controlling NO_x, SO₂, CO, PE/PM₁₀, Pb, Hg, and Volatile Organic Compounds (VOC)* from this emissions unit. BACT has been determined to be the following for each pollutant:
- i. PE/PM₁₀ - Operation of a control system consisting of two baghouses with an overall capture efficiency of 98% and a maximum outlet grain loading of 0.0018 grains /dscf.
 - ii. CO - The operation of a Direct Evacuation Control (DEC) system with air gap, and operation of a cooled post combustion chamber with burners that achieves an overall emission rate of 7.5 lbs of CO/ton of liquid steel produced.**
 - iii. NO_x - The operation of a Direct Evacuation Control (DEC) system with air gap, and operation of a cooled post combustion chamber with burners that achieves an overall emission rate of 0.57 lb of NO_x /ton of liquid steel produced.**
 - iv. SO₂ - The development maintenance, and process operations under a scrap management plan that achieves an overall emission rate of 0.25 lb of SO₂/ton of liquid steel produced.**
 - v. VOC - The development maintenance, and process operations under a scrap management plan that achieves an overall emission rate of 0.35 lb of VOC/ton of liquid steel produced.**
 - vi. Pb, Hg - Operation of a control system consisting of two baghouses with an overall capture efficiency of 98% and a maximum outlet grain loading of 0.0018 grains /dscf, and the development, maintenance, and operation under a scrap management plan.

* For the purposes of the BACT review, it was assumed all OC was VOC. The regulation of OC effectively regulates VOC.

** These emission rates are for emission units P901, P902, and P903, combined.

- 2.b** The permittee shall not cause to be discharged into the atmosphere any gasses which:
- i. exit from the baghouses controlling the EAF and exhibit 3% opacity or greater; and
 - ii. exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.
- 2.c** The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 60, Subpart AAa.
- 2.d** The standard for particulate matter specified by 40 CFR 60.272a(a)(1) is less stringent than the emission limit established pursuant to OAC rules 3745-31-10 through OAC rule 3745-31-20.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20.
- 2.f** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) by committing to comply with the BACT requirements established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20 in PTI 03-17004.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.g** This facility is not located within an "Appendix A" area as 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. Additional Terms and Conditions (continued)

- 2.h** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-08(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i** All particulate matter emitted is PM10.
- 2.j** The emission limitations established under this rule are for emissions units P901, P902, and P903 combined.
- 2.k** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the BACT requirements established pursuant to OAC rule 3745-31-10 through OAC rule 3745-31-20 in PTI 03-17004.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.l** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart AAa.

II. Operational Restrictions

- 1.** The permittee shall limit production in emissions unit P901 to an average of 315 tons of liquid steel per hour. Annual production from emissions unit P901 shall not exceed 2.76 million tons of liquid steel per year, based upon a rolling, 12-month summation of the monthly liquid steel production.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]
- 2.** The permittee shall implement the following control practices:
- the post combustion chamber ignition burner set point shall be at a minimum of 1.0 MW (megawatt) during any EAF steel making operation;
 - the active EAF DEC offgas ignition burner set point shall be at a minimum of 1.0 MW during any EAF steel making operation; and,
 - the combustion air fan for the active EAF shell shall be set to ensure excess combustion air.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]
- 3.** The control system's fan motor amperes set points and damper positions shall be maintained within +/- 15% of the values established during the most recent emission testing that demonstrated the emissions unit was in compliance.
- [Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64, and PTI 03-17004]
- 4.** 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 Ohio EPA, NWDO and shall be viewed as part of the operational requirements for the permit. Any change to the "Scrap Management Program" that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by Ohio EPA, NWDO.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 03-17004]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the visible emissions from the two baghouses controlling emissions units P901, P902, and P903. Observations of the opacity of the visible emissions from these control devices shall be performed by a certified visible emission observer as follows:
 - a. The permittee shall conduct visible emission observations on each control device in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Visible emission observations shall be conducted at least once per day when the furnace is operating in the melting and refining period. These observations shall be taken in accordance with Method 9 for at least three 6-minute periods.
 - c. 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 ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
 - e. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03- 17004]

2. The permittee shall monitor the operation of each control system and maintain records in accordance with the following requirements:
 - a. The permittee shall check and record on a once-per-shift basis the control system fan motor amperes and damper positions. The monitoring devices may be installed in any appropriate location such that reproducible monitoring will result. The Ohio EPA, NWDO may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60.
 - b. When the permittee is required to demonstrate compliance with the visible emission limitation in condition A.I.2.b. and at any other time, the Ohio EPA, NWDO may require that all control system fan motor amperes and damper positions be determined during all periods in which a hood is operated for the purpose of capturing emissions.
 - c. The permittee may petition the Ohio EPA, NWDO for reestablishment of these parameters whenever the permittee can demonstrate to the agency's satisfaction that the operating conditions upon which the parameters were previously established are no longer applicable. Operation at other than baseline values will be considered by the Ohio EPA to be unacceptable operation and maintenance of the control system.
 - d. 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). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, NWDO to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03- 17004]

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

3. Daily observations of the opacity of the visible emissions from the meltshop shall be performed by a certified visible emission observer as follows:
- a. The permittee shall conduct visible emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Shop opacity observations shall be conducted at least once when the furnace is operating in the melting and refining period.
 - c. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop. Shop opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of 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.
 - d. The permittee shall ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
 - e. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.3(a) and PTI 03-17004]

4. The permittee shall maintain on site a record of all baghouse dust analysis for both baghouses serving emissions units P901, P902, and P903. At a minimum, the analysis shall contain a record of the Pb content in percent by weight.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

5. The permittee shall maintain daily production records of the following for emissions unit P901:
- a. the number of hours of operation;
 - b. the tons of liquid steel produced; and,
 - c. the average hourly production rate (b divided by a).

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

6. The permittee shall maintain monthly records of the following for emissions unit P901, P902, and P903 combined:
- the tons of liquid steel produced;
 - the emissions* of SO₂, CO, OC, and NO_x, and the fugitive emissions**of PE, PM₁₀, Pb, and Hg;
 - of annual production of liquid steel, based on a rolling 12-month summation, and
 - the annual emissions of SO₂, CO, OC, NO_x, and the fugitive emissions of PE, PM₁₀, Pb, and Hg, based on a rolling 12-month summation.

* The permittee shall use the continuous monitoring requirements in condition A.III.9. to determine monthly CO emissions. For all other pollutants, the permittee shall use the emission factors established from the testing requirements in condition A.V.1.

** The fugitive PE emissions shall be calculated from the emission factors 1.4 pounds of PE per ton of steel produced for the EAF (emissions unit P901, with 98% capture) and 0.6 pound of PE per ton of steel produced for the Ladle Metallurgy Furnaces (LMFs, emissions units P902 and P903, with 99% capture) applied to the monthly production rates. Fugitive PM₁₀ shall be calculated assuming 76% by weight of all PE is PM₁₀. For fugitive Pb and Hg, the permittee shall calculate emissions by applying the weight percentages established by the most recent testing/analysis which has been performed for these metals.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

7. The permittee shall maintain monthly records of the following for emissions unit P901, P902, and P903 combined:
- the hours of operation;
 - the stack emissions* of PM₁₀, Pb, and Hg;
 - the annual stack emissions of PM₁₀, Pb, and Hg, based on a rolling 12-month summation.

* The permittee shall calculate the emission rates for each baghouse stack. For stack PM₁₀, the permittee shall use the hourly emission rates established in condition A.V.1. For stack Pb and Hg, the permittee shall calculate emissions by applying the weight percentages established by the most recent testing/analysis which has been performed for these metals.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

8. The permittee shall maintain daily records of all instances where the computer program for monitoring the set points established in condition A.II.2. above for emissions unit P901 required cessation of, or delays in, furnace operations. The records shall include the reasons for any delay and/or cessation in furnace operations, the duration, a description of the corrective actions taken, and a determination whether or not a malfunction resulting in a violation of a condition of the permit has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

9. The permittee shall operate and maintain equipment to continuously monitor and record CO from both exhaust systems serving this emissions unit, in the units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

10. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(b)]

11. The permittee shall maintain a supply of bags, or any other parts necessary to ensure that the collection/control system will operate properly. Any worn, clogged, or broken equipment should be replaced, or fixed within a reasonable timeframe.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(e)]

12. Within 180 days of the issuance of this permit, the permittee shall install, calibrate, maintain, and continuously operate a fabric filter bag leak detection system, in accordance with the system manufacturer's instructions, to monitor the baghouse performance. For this purpose, the term "fabric filter bag leak detection system" means a system that is capable of continuously monitoring relative particulate emissions (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate emissions loadings. The fabric filter bag leak detection system shall meet the following:

a. The fabric filter bag leak detection system must be certified by the manufacturer to be capable of detecting particulate emissions at concentrations that are equivalent, at the actual operating conditions of the melt shop baghouse, to 0.0018 grains per dry standard cubic foot or less.

b. The fabric filter bag leak detection system sensor must provide output of relative particulate emissions loading, and the permittee shall continuously record the output signal from the sensor.

c. The fabric filter bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate emissions loading is detected over a preset level, and the alarm must be located such that it can be heard by the appropriate plant personnel.

d. The initial adjustment of the fabric filter bag leak detection system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time except as detailed in the operations, maintenance, and monitoring plan. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

e. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

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

13. If the fabric filter bag leak detection system alarms, the permittee shall initiate investigation of the melt shop baghouse within 1 hour of the first discovery of the alarming incident for possible corrective action. If corrective action is required, the permittee shall proceed to implement such corrective action, in accordance with a written corrective action plan, as soon as practicable in order to minimize possible exceedances of the emission limitations established in Section A.I. The corrective action plan shall include, at a minimum, the following provisions:
- a. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
 - b. Sealing off defective bags or filter media.
 - c. Replacing defective bags or filter media, or otherwise repairing the control device.
 - d. Sealing off a defective baghouse compartment.
 - e. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
 - f. Shutting down the melt shop operations, including the electric arc shaft furnace.

The permittee shall maintain records of each bag leak detection system alarm, including the date and time of the alarm, the amount of time taken for corrective action to be initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

14. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

15. The permittee shall maintain records of all inspections and maintenance performed on the fabric filter bag leak detection system. Records shall include the date and time of each inspection or maintenance activity; the activities performed; and the results of any drift checks and response tests.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

16. At least once per week, the permittee shall confirm that dust is being removed from the melt shop baghouse hoppers through visual inspection or equivalent means of ensuring the proper functioning of removal mechanisms.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

17. At least once per month, the permittee shall perform a check of the bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7]

18. After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(e)]

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

19. The CAM plan for this emissions unit has been developed for PE. The CAM performance indicators for the baghouse controlling this emissions unit are opacity monitoring of the baghouse, fan motor amperage on the collection system and and operating a fabric filter bag leak detection system. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.3 below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. Fan motor amperage operating parameters will be re-verified through periodic emission testing. In addition to opacity monitoring and periodic monitoring of the operating parameters and operating a fabric filter bag leak detection system, the permittee also has an inspection/preventative maintenance program for the baghouse and capture system. Based on the results of the inspection/preventative maintenance program, repairs to the baghouse and capture system shall be made as needed. If the current CAM indicators and/or the baghouse and capture system inspection/preventative maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.7(d) and 40 CFR Part 64.8]

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- all exceedance of the production restrictions contained in condition A.II.1.;
 - all exceedance of the rolling, 12-month emission limitations specified in condition A.I.1. of this permit;
 - all periods of time during which the control system's set points did not comply with the values established in condition A.II.2;
 - all periods of time during which any of the control system fan motor ampere values or damper positions did not comply with the values established pursuant to condition A.II.3; and
 - all periods of time during which the scrap was not handled in accordance with the permittee's "Scrap Management Program."

The permittee shall submit these deviation reports in accordance with General Term and Condition A.1.c.iii. of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.7(d), 40 CFR Part 64.9(a) and PTI 03- 17004]

2. The permittee shall submit a semiannual written report of all exceedances of the opacity restrictions contained in condition A.I.2.b. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limits. If no deviations occurred during the reporting period, the permittee shall submit a report which states that no deviations occurred. These reports shall be submitted by January 31st and July 31st of each year and shall cover the previous six month period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart AAa, 40 CFR Part 64.7(d), 40 CFR Part 64.9(a) and PTI 03- 17004]

3. If the results of monitoring or record keeping data indicate that the particulates emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a)]

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All periods of time in which the bag leak detection alarm system was triggered.
 - b. All periods of time (including the date) in which the permittee did not initiate corrective actions, as defined in the CAM plan, within 1 hour of an alarm from the bag leak detection system.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.9]

5.
 - a. Pursuant to and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any limitations specified in the terms and conditions of this permit. These reports shall also contain the total CO emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
 - d. Pursuant to and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60 section 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

V. Testing Requirements

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

V. Testing Requirements (continued)

- a. The emission testing shall be conducted in accordance with the time frames specified in PTI# 03-17004 (issued 12/20/05), and within 12 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x, CO, SO₂, OC, and Hg, the allowable outlet grain loadings for PM₁₀, and the opacity requirements specified in A.I.2.b.i. and A.I.2.b.ii. The mass emission testing shall also be used to demonstrate compliance with the lb/ton of liquid steel emission rates established in condition A.I.2.a.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; for SO₂, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for PM₁₀, Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M, for OC, Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR, Part 60, Appendix A; for Hg*, Methods 1 through 5 and 29 of 40 CFR, Part 60, Appendix A; and for opacity, Method 9 of 40 CFR, Part 60, Appendix A. During the initial compliance demonstration, testing for NO_x, CO, SO₂, and OC must be performed on both baghouses simultaneously. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. During the performance testing to demonstrate compliance with the outlet grain loading for PM₁₀, and the opacity requirements, the following additional testing requirements shall be employed:
 - i. The sampling time and sample volume for each Method 201 run shall be at least 4 hours and 4.50 dscm (160 dscf) and the sampling time shall include an integral number of heats.
 - ii. Opacity measurements shall be taken concurrently with each Method 201 run.
 - iii. The test runs shall be conducted concurrently, unless inclement weather interferes.
 - iv. The permittee shall obtain and record the following information:
 - (a) all control system fan motor amperes and damper positions during all periods in which a hood is operated for the purpose of capturing emissions from the EAF's;
 - (b) charge weights and materials and tap weights and materials;
 - (c) heat times, including start and stop times, and a log of process operation, including periods of no operation during testing; and
 - (d) control device operation log.
- e. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- f. Except as specified in condition A.V.1.d., the sampling time for each run shall be 8 hours in duration.

V. Testing Requirements (continued)

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

h. Personnel from the Ohio EPA 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.

i. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA NWDO.

* As part of the testing for Hg the permittee shall determine the weight percentages of Hg as compared to PM10, and the total mass emission rate for PM10. Testing for Hg shall be performed under "worst case" conditions.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

2.a Emission Limitation:
78.80 lbs SO₂ /hr, 0.25 lb of SO₂ /ton of liquid steel produced
179.60 lbs NO_x/hr, 0.57 lb of NO_x /ton of liquid steel produced
2362.50 lbs CO/hr, 7.5 lbs of CO/ton of liquid steel produced
110.30 lbs OC/hr, 0.35 lb of VOC/ton of liquid steel produced

Applicable Compliance Method:

Compliance with the hourly CO mass emission limitations shall be determined in accordance with the test methods and procedures specified in condition A.V.1. and the monitoring requirements specified in condition A.III.9. Compliance with the other mass emission limitations and lbs/ton of liquid steel produced limitations shall be determined in accordance with the test methods and procedures specified in condition A.V.1.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

2.b Emission Limitation:
Baghouse #1 Stack Emissions
0.0018 grains PM10/dscf, 88.1 tons PM10/rolling 12-month period
0.10 lb Pb/hr, 0.44 tons Pb/rolling 12-month period
0.050 lb Hg/hr, 0.22 ton Hg/rolling 12-month period

Baghouse #2 Stack Emissions

0.0018 grains PM10/dscf, 79.1 tons PM10/rolling 12-month period
0.09 lb Pb/hr, 0.39 tons Pb/rolling 12-month period
0.045 lb Hg/hr, 0.20 ton Hg/rolling 12-month period

Applicable Compliance Method:

Compliance with the allowable outlet grain loading and the hourly mass emission limitations for Hg shall be determined in accordance with the test methods and procedures specified in condition A.V.1. The stack Pb emissions were established based on a maximum weight percentage of the PM10 limit of 0.5% for Pb and will be verified in accordance with the analysis specified in condition A.III.4. Compliance with the annual emission limitations shall be determined in accordance with record keeping procedures specified in condition A.III.7.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

V. Testing Requirements (continued)

- 2.c** Emission Limitation:
345.1 tons SO₂/rolling 12-month period
786.7 tons NO_x/rolling 12-month period
10347.8 tons CO/rolling 12-month period
483.1 tons OC/rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined in accordance with record keeping procedures specified in condition A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

- 2.d** Emission Limitation:
Fugitive Emissions
46.9 tons PE/rolling 12-month period
35.7 tons PM₁₀/rolling 12-month period
0.23 ton Pb/rolling 12-month period
0.12 ton Hg/rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined in accordance with the record keeping procedures specified in condition A.III.6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

- 2.e** Emission Limitation:
The permittee shall not cause to be discharged into the atmosphere any gasses which exit from the stack of the baghouse controlling the EAF and exhibit 3% opacity or greater; and

Applicable Compliance Method:

Compliance with the opacity limitation shall be determined in accordance with record keeping procedures specified in condition A.III.1.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

- 2.f** Emission Limitation:
The permittee shall not cause to be discharged into the atmosphere any gasses which exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.

Applicable Compliance Method:

Compliance with the opacity limitation shall be determined in accordance with record keeping procedures specified in condition A.III.3.

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

VI. Miscellaneous Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1),40 CFR, Part 60, Subpart AAa, and PTI 03- 17004]

VI. Miscellaneous Requirements (continued)

2. The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring systems designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

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

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

4. Prior to the installation of the new continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 and 6 for approval by the Ohio EPA, Central Office.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

5. Within 180 days of the installation of the second baghouse controlling this emissions unit, the permittee shall conduct certification tests of the new continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4 and 6.

[Authority for term: OAC rule 3745-77-07(C)(1), and PTI 03- 17004]

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The Permit to Install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the Permit to Install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the Permit to Install application and the Screen3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the Screen3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Manganese
 TLV (mg/m3): 200
 Maximum Hourly Emission Rate (lbs/hr): 1.13
 Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 2.08
 MAGLC (mg/m3): 4.76

Pollutant: Zinc
 TLV (mg/m3): 2000
 Maximum Hourly Emission Rate (lbs/hr): 21.0
 Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 38.7
 MAGLC (mg/m3): 47.6

- Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- 2.a** changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 2.b** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- 2.c** physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- 3.** The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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