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

04/17/06

CERTIFIED MAIL

RE: Final Title V Significant Permit Modification Chapter 3745-77 permit

03-51-01-0017
Nucor Steel Marion, Inc.
Bob Hice
912 Cheney Avenue
Marion, OH 43301-1801

Dear Bob Hice:

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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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, Ohio 43215

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

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
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 SIGNIFICANT PERMIT MODIFICATION

Original Effective Date: 05/22/02	Expiration Date: 05/22/07	Modification Effective Date: 04/17/06

This document constitutes issuance of a Title V significant permit modification for Facility ID: 03-51-01-0017 to:
Nucor Steel Marion, Inc.
912 Cheney Avenue
Marion, OH 43301-1801

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

F001 (Vehicular Traffic) Truck traffic on plant roads	P009 (Rolling Mill/Reheat Furnace) Steel rolling mill including reheat furnace	
P004 (Continuous Caster) Continuous casting of steel into billets	P903 (Elec. Arc Furnace #3) Scrap steel melting	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

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

Ohio Environmental Protection Agency

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.

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 <u>Federally Enforceable</u> 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. The following insignificant emissions units are located at this facility:

Z012-standby generator
Z013-lime load-in
Z014-scrap piles
Z018-standby generator

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, and 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 SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

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 requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

P005-ladle preheat furnaces
P007-tundish preheat furnaces
Z004-hand torches
Z006-degreasing
Z007-stenciling
Z008-welding
Z009-lime load-out
Z017-powder coat line

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vehicular Traffic (F001)

Activity Description: Truck traffic on plant roads

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
paved and unpaved roadways and parking areas	OAC rule 3745-17-07(B)	none (See A.I.2.a.)
	OAC rule 3745-17-08(B)	none (See A.I.2.b.)

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible emissions limitations 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 as identified in OAC rule 3745-17-08 (it is located in Marion County). Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Continuous Caster (P004)

Activity Description: Continuous casting of steel into billets

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
continuous caster, with baghouse	OAC rule 3745-17-07(B)	none (See A.I.2.a.)
	OAC rule 3745-17-08(B)	none (See A.I.2.b.)

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible emissions limitations 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 as identified in OAC rule 3745-17-08 (it is located in Marion County). 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 This is an existing emissions unit (it was installed in June of 1967). The control equipment, however, was added in 1987. Hence, this emissions unit is considered to be a fugitive source, and OAC rules 3745-17-11* and 3745-17-07(A)* are not applicable.

* These rules became effective on July 17, 1972.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Rolling Mill/Reheat Furnace (P009)

Activity Description: Steel rolling mill including reheat furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
96 tons/hr, natural gas-fired (130 mmBtu/hr) steel billet reheat furnace, including a rolling mill	OAC rule 3745-31-05(A)(3) (PTI #03-03077, issued 8/18/05)	The combined emissions from the burner stack and main stack shall not exceed 0.08 lb sulfur dioxide (SO2)/hr. The combined emissions from the burner stack and main stack shall not exceed 0.74 lb volatile organic compounds (VOC)/hr. The combined emissions from the burner stack and main stack shall not exceed 1.02 lbs particulate emissions (PE)/hr (see A.I.2.a). The combined emissions from the burner stack and main stack shall not exceed 11.29 lbs carbon monoxide (CO)/hr. The combined emissions from the burner stack and main stack shall not exceed 84.54 lbs nitrogen oxides (NOx)/hr. There shall be no visible PE from the burner stack and main stack. See A.I.2.b. See A.I.2.c.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(C) (PTI #03-03077, issued 8/18/05)	The combined emissions from the burner stack and main stack shall not exceed 0.20 ton of SO2 per rolling, 12-month period. The combined emissions from the burner stack and main stack shall not exceed 1.85 tons of VOC per rolling, 12-month period. The combined emissions from the burner stack and main stack shall not exceed 2.55 tons of PE per rolling, 12-month period. The combined emissions from the burner stack and main stack shall not exceed 28.22 tons of CO per rolling, 12-month period. The combined emissions from the burner stack and main stack shall not exceed 211.0 tons of NOx per rolling, 12-month period.
	OAC rule 3745-17-07(A)	See A.I.2.d.
	OAC rule 3745-17-07(B)	none (See A.I.2.e.)
	OAC rule 3745-17-08(B)	none (See A.I.2.f.)
	OAC rule 3745-17-11(B)(2)	none (See A.I.2.g.)
	OAC rule 3745-18-06(E)	See A.I.2.h.

2. Additional Terms and Conditions

2.a All PE is assumed to be PM10.

2.b Best available technology (BAT) for this emissions unit has been determined to be the use of natural gas.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).

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

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

2.g 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)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Marion County.

2.h 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.i The permittee shall develop a burner tuning/calibration plan that ensures fuel burner(s) are operated and maintained in accordance with the manufacturers recommendations to ensure efficient combustion of the fuel and to ensure compliance with the applicable emission limitations . The burner tuning/calibration plan shall contain the evaluation of and adjustment to manufacturer's specifications of such parameters as fuel flow, fuel pressure, flue gas analysis, etc. The plan shall also contain information addressing the required frequency of the burner tuning/calibration. The plan shall be submitted to the appropriate Ohio EPA district office or local air agency with 90 days of the issuance of this permit. The burner tuning/calibration plan will require approval by the Ohio EPA.

2.j The hourly PE, SO2, CO, VOC, and NOx emission limitations were established for PTI purposes to represent the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these emission limitations.

II. Operational Restrictions

1. The maximum annual natural gas usage rate for this emissions unit shall not exceed 672 mm cu. ft/rolling, 12-month period, based upon the summation of the monthly natural gas usage rates.

[OAC rule 3745-77-07(A)(1) and PTI #03-03077]

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

[OAC rule 3745-77-07(A)(1) and PTI #03-03077]

3. The permittee shall have the burners on this emissions unit calibrated on an annual basis.

[OAC rule 3745-77-07(A)(1) and PTI #03-03077]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. the natural gas usage rate for each month, in mm cu. ft;

b. the rolling, 12-month natural gas usage rates, in mm cu. ft;

c. the calculated NOx emission rate for each month, in tons, using the following equation:

NOx emissions = (A.III.1.a) x (629 lbs NOx/mm cu. ft*) x (ton/2000 lbs); and

d. the rolling, 12-month NOx emission rate, in tons.

*The NOx emission factor of 629 lbs NOx/mm cu. ft was established based on the results of stack test data for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

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

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

3. The permittee shall maintain records of the annual calibration of the burners on this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

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

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions or presence of flames from the stacks serving this emissions unit. The presence or absence of visible emissions or flames shall be noted in an operations log. If visible emissions or flames are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions and/or presence of flames;

b. the total duration of any visible emission or flame incident;

c. any corrective actions taken to eliminate the visible emissions or flames.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

5. The permittee shall record the results of each burner tuning/calibration performed. Tuning/calibration results shall include pre-tuning and post-tuning information. The tuning/calibration information collected and recorded shall conform with the permittee's tuning/calibration plan (see A.I.2.i).

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following

a. the rolling, 12-month NOx emission limitation of 211 tons; and

b. the rolling, 12-month natural gas usage restriction of 672 mm cu. ft.

These reports shall be submitted in accordance with Paragraph A.I.c.ii. of the General Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

2. 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.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

3. The permittee shall submit a report that certifies that the annual calibration of the burners on this emission has been completed. This report shall be submitted within 30 days after the calibration has been conducted.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions or flames were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions or flames. 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 6-month period.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

5. The permittee shall submit a copy of the results for each burner tuning/calibration performed to the Ohio EPA, Northwest District Office. These reports shall be submitted to the Ohio EPA, Northwest District Office within 30 days of the date that the burner tuning/calibration was performed.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

V. Testing Requirements

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

a. The emission testing shall be conducted no earlier than 12 months and no less than 6 months prior to the expiration of the current Title V permit (i.e., between May 22, 2006 and November 22, 2006).

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

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for PE, Methods 1-5 (including the back half of the sampling train and a particle size distribution) of 40 CFR, Part 60, Appendix A; for NOx, Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

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

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

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

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

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

V. Testing Requirements (continued)

2.a Emission Limitations: The combined emissions from the burner stack and main stack shall not exceed 0.74 lb VOC/hr and 1.85 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable VOC emission limitation by multiplying the maximum hourly gas usage rate of 0.1344 mm cu. ft by an emission factor of 5.5 lbs/mm cu. ft (from AP-42, Section 1.4 [revised 7/98]).

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation based on the results of emission testing conducted in accordance with Methods 1-4, 18, 25 or 25A, as applicable, of 40 CFR Part 60, Appendix A.

As long as compliance with the maximum annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was developed by multiplying the emission factor of 5.5 lb VOC/mm cu. ft by the maximum annual natural gas usage rate of 672 mm cu. ft/yr, and then dividing by 2000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

2.b Emission Limitations: The combined emissions from the burner stack and main stack shall not exceed 1.02 lbs PE/hr and 2.55 tons PE per rolling, 12-month period.

Applicable Compliance Method:

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

The permittee may also demonstrate compliance with the hourly allowable PE limitation based on multiplying the maximum hourly gas usage rate of 0.1344 mm cu. ft by the emission factor of 7.6 lbs PE/mm cu. ft (from AP-42, Section 1.4 [revised 7/98]).

As long as compliance with the maximum annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was developed by multiplying the emission factor of 7.6 lbs PE/mm cu. ft by the maximum annual natural gas usage rate of 672 mm cu. ft/yr, and then dividing by 2000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

2.c Emission Limitations: The combined emissions from the burner stack and main stack shall not exceed 11.29 lbs CO/hr and 28.22 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

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

The permittee may also demonstrate compliance with the hourly allowable CO emission limitation based on multiplying the maximum hourly gas usage rate of 0.1344 mm cu. ft by the emission factor of 84 lbs CO/mm cu. ft (from AP-42, Section 1.4 [revised 7/98]).

As long as compliance with the maximum annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was developed by multiplying the emission factor of 84 lbs CO/mm cu. ft by the maximum annual natural gas usage rate of 672 mm cu. ft/yr, and then dividing by 2000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

V. Testing Requirements (continued)

2.d Emission Limitations: The combined emissions from the burner stack and main stack shall not exceed 84.54 lbs NOx/hr and 211.0 tons NOx per rolling, 12-month period

Applicable Compliance Method:

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

The permittee may also demonstrate compliance with the hourly allowable NOx emission limitation based on multiplying the maximum hourly gas usage rate of 0.1344 mm cu. ft by the emission factor of 629 lbs NOx/mm cu. ft (based on stack test data]).

As long as compliance with the maximum annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was developed by multiplying the emission factor of 629 lbs NOx/mm cu. ft by the maximum annual natural gas usage rate of 672 mm cu. ft/yr, and then dividing by 2000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

2.e Emission Limitations: The combined emissions from the burner stack and main stack shall not exceed 0.08 lb SO2/hr and 0.20 ton of SO2 per rolling, 12-month period.

Applicable Compliance Method:

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

The permittee may also demonstrate compliance with the hourly allowable SO2 emission limitation based on multiplying the maximum hourly gas usage rate of 0.1344 mm cu. ft by the emission factor of 0.6 lb SO2/mm cu. ft (from AP-42, Section 1.4 [revised 7/98]).

As long as compliance with the maximum annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be assumed (the annual emission limitation was developed by multiplying the emission factor of 0.6 lb SO2/mm cu. ft by the maximum annual natural gas usage rate of 672 mm cu. ft/yr, and then dividing by 2000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

2.f Emission Limitation: There shall be no visible PE from the burner stack and from the main stack.

Applicable Compliance Method: Compliance shall be determined in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

2.g Emission Limitation: The maximum annual natural gas usage rate for this emissions unit shall not exceed 672 mm cu. ft/rolling, 12-month period, based upon a summation of the monthly natural gas usage rates.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual mm cu. ft natural gas restriction above based on the record keeping requirements established in section A.III.1 of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

VI. Miscellaneous Requirements

1. Burner Tuning/Calibration

a. Introduction

The permittee is required to conduct periodic tuning/calibration of the furnace burner system. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emissions rates and are minimized.

b. Qualifications for Burner Tuning/Calibration

Technicians who conduct the burner tuning/calibration must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning/calibration procedure. Technicians who are qualified shall, at a minimum, have passed manufacturers training concerning burner tuning/calibration, or have been trained by someone who has completed the manufacturers training concerning burner tuning/calibration.

c. Burner Tuning/Calibration Procedure and Frequency

The permittee shall perform burner tuning/calibration in accordance with and at frequencies outlined in the burner tuning/calibration plan required in A.I.2.f.

[OAC rule 3745-77-07(C)(1) and PTI #03-03077]

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Elec. Arc Furnace #3 (P903)

Activity Description: Scrap steel melting

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
70 tons/hr electric arc furnace with baghouse and dust handling system	OAC rule 3745-31-05(A)(3) (PTI #03-16353, issued 8/18/05)	See A.I.2.a., A.I.2.i. and A.I.2.l.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(C) (PTI #03-16353, issued 8/18/05)	Baghouse Stack Emissions: 0.0050 gr of particulate emissions (PE)/dscf, 68.56 tons of PE per rolling, 12-month period (See A.I.2.b. & A.I.2.h.) 27.72 lbs nitrogen oxides (NOx)/hr, 110.88 tons of NOx per rolling, 12-month period (See A.I.2.b.) 0.25 lb lead (Pb)/hr, 1.0 ton of Pb per rolling, 12-month period (See A.I.2.b.) 0.063 lb mercury (Hg)/hr, 0.25 ton of Hg per rolling, 12-month period (See A.I.2.b.) Fugitive Emissions: 140.0 tons of fugitive PE per rolling, 12-month period (See A.I.2.b.) 81.20 tons of fugitive PM10 per rolling, 12-month period (See A.I.2.b.) 1.11 tons of fugitive NOx per rolling, 12-month period (See A.I.2.b.) 0.01 ton of fugitive Pb per rolling, 12-month period (See A.I.2.b.) 0.0025 ton of fugitive Hg per rolling, 12-month period (See A.I.2.b.)

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-10 through 3745-31-20 (PTI #03-16353, issued 5/26/05)	Baghouse Stack Emissions: 17.50 lbs sulfur dioxide (SO2)/hr, 70.0 tons of SO2 per rolling, 12-month period (See A.I.2.c.) 20.02 lbs volatile organic compounds (VOC)/hr, 80.08 tons of VOC per rolling, 12-month period (See A.I.2.c.) 284.20 lbs CO/hr, 1136.80 tons of CO per rolling, 12-month period (See A.I.2.c.) Fugitive Emissions: 0.70 ton of SO2 per rolling 12-month period (See A.I.2.c.) 0.80 ton of VOC per rolling 12-month period (See A.I.2.c.) 11.37 tons of CO per rolling 12-month period (See A.I.2.c.)
	OAC rule 3745-17-07(A)	See A.I.2.d.
	OAC rule 3745-17-07(B)	See A.I.2.e.
	OAC rule 3745-17-08(B)	See A.I.2.f.
	OAC rule 3745-17-11(B)	See A.I.2.g.
	OAC rule 3745-18-06(E)	See A.I.2.g.
	40 CFR, Part 60, Subpart AAa	See A.I.2.j. and A.I.2.k.

2. Additional Terms and Conditions

2.a Best available technology (BAT) for this emissions unit has been determined to be the following:

i. use of a baghouse with an outlet grain loading concentration of 0.0050 gr PE/dscf;

ii. use of a direct-shell evacuation control system (DEC) during refining and melting;

iii. use of a segmented canopy hood, scavenger ducting, cross-draft partitioning and closed roof monitors and also includes compliance with the requirements of 40 CFR, Part 60, Subpart AAa.

2. Additional Terms and Conditions (continued)

2.b The permittee has requested the following federally enforceable emission limitations established pursuant to OAC rule 3745-31-05(C) based on a daily average throughput rate and hours of operation restrictions (See A.II.1 and A.II.2) for purposes of avoiding "Prevention of Significant Deterioration" analysis:

Baghouse stack emissions:

i. for PE: 0.005 gr PE/dscf (17.14 lbs PE/hr), 68.56 tons of PE per rolling, 12-month period;

ii. for NOx: 27.72 lbs NOx/hr, 110.88 tons of NOx per rolling, 12-month period;

iii. for Pb: 0.25 lb Pb/hr, 1.0 ton of Pb per rolling, 12-month period; and

iv. for Hg: 0.063 lb Hg/hr, 0.25 ton of Hg per rolling, 12-month period.

Fugitive Emissions:

i. for PE: 140.0 tons of fugitive PE per rolling, 12-month period;

ii. for PM10: 81.20 tons of fugitive PM10 per rolling, 12-month period;

iii. for NOx: 1.11 tons of fugitive NOx per rolling, 12-month period;

iv. for Pb: 0.01 ton of fugitive Pb per rolling, 12-month period; and

v. for Hg: 0.0025 ton of fugitive Hg per rolling, 12-month period.

2.c The permittee shall employ best available control technology (BACT) for this emissions unit. BACT has been determined to be the following emission limitations:

i. for SO2: 17.50 lbs SO2/hr, 70.0 tons of SO2 per rolling, 12-month period, 0.70 ton of fugitive SO2 per rolling, 12-month period;

ii. for VOC: 20.02 lbs VOC/hr, 80.08 tons of VOC per rolling, 12-month period, 0.80 ton of fugitive VOC per rolling, 12-month period; and

iii. for CO: 284.20 lbs CO/hr, 1136.80 tons of CO per rolling, 12-month period and 11.37 tons of fugitive CO per rolling, 12-month period.

The BACT analysis determined that no controls were cost-effective.

2.d The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to 40 CFR, Part 60, Subpart AAa.

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

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

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

2.h All PE from the baghouse stack is particulate matter less than 10 microns in size (PM10).

2.i The requirements of this rule also includes compliance with OAC rule 3745-31-05(C) and OAC rule 3745-31-10 through 3745-31-20 and 40 CFR 60.272(a)(2) & 40 CFR 60.272(a)(3).

2. Additional Terms and Conditions (continued)

2.j The permittee shall not cause to be discharged into the atmosphere any gases which:

i. exit from the stack of the baghouse 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.k The standard for particulate matter specified by 40 CFR 60.272a(a)(1) is less stringent the emission limit established pursuant to OAC rule 3745-31-05(C). The standard for particulate matter specified by 40 CFR 60.272a(b) is less stringent the emission limit established pursuant to OAC rule 3745-31-05(A)(3).

2.l There shall be no visible PE from the building enclosing the baghouse dust handling system.

II. Operational Restrictions

1. The hourly throughput rate for this emissions unit shall not exceed 70 tons of steel (based on a daily average).

[OAC rule 3745-77-07(A)(1) and PTI #03-16353]

2. The maximum annual operating hours for this emissions unit shall not exceed 8000 hours/rolling, 12-month period, based upon the summation of the monthly numbers of operating hours.

To ensure enforceability during the first 12 calendar months of operation following the issuance of PTI 03-16353, the permittee shall not exceed the operating hours levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Operating Hours
1	667
1-2	1334
1-3	2001
1-4	2668
1-5	3335
1-6	4002
1-7	4669
1-8	5336
1-9	6003
1-10	6670
1-11	7337
1-12	8000

After the first 12 calendar months of operation following the issuance of PTI 03-16353, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month period.

[OAC rule 3745-77-07(A)(1) and PTI #03-16353]

3. The pressure drop across the baghouse serving this emissions unit shall be maintained in the range of 0.5 to 8 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times, except during periods of cleaning, new bag installations and other scheduled maintenance operations.

[OAC rule 3745-77-07(A)(1) and PTI #03-16353]

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 NWDO and shall be viewed as part of the operational requirements for the EAF 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 NWDO.

[OAC rule 3745-77-07(A)(1) and PTI #03-16353]

II. Operational Restrictions (continued)

5. The control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be maintained at the appropriate levels established during the most recent emission testing that demonstrated that the emissions unit was in compliance.

[OAC rule 3745-77-07(A)(1) and PTI #03-16353]

III. Monitoring and/or Record Keeping Requirements

1. A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) is not required on any modular, multi-stack, negative-pressure or positive-pressure fabric filter if observations of the opacity of the visible emissions from the control device are performed by a certified visible emission observer; or on any single-stack fabric filter if visible emissions from the control device are performed by a certified visible emission observer and the owner installs and continuously operates a bag leak detection system according to paragraph (e) of this section. Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the 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 the visible emission, only one set of three 6-minute observations will be required. In that case, the 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. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in A.I.2.j.i.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

2. A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of shop opacity are performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

3. A bag leak detection system must be installed and continuously operated on all single-stack fabric filters if the permittee elects not to install and operate a continuous opacity monitoring system as provided for under A.III.1. In addition, the permittee shall meet the visible emissions observation requirements in paragraph A.III.1. of this section. The bag leak detection system must meet the specifications and requirements of paragraphs A.III.3.a. through A.III.3.h.

a. The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

b. The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)

c. The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to paragraph A.III.3.d. of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

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

d. For each bag leak detection system required by paragraph A.III.3. of this section, the owner or operator shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of this paragraph A.III.3.d. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA–454/R–98–015). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system including quality assurance procedures;

(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and

(v) How the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the 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 (if applicable).

f. Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in paragraphs A.III.3.f.i. and A.III.3.f.ii. of this section.

(i) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under paragraphs A.III.3.d. of this section.

(ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under paragraph A.III.1. of this section and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

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

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

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

4. For each bag leak detection system installed according to paragraph A.III.3. of this section, the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under paragraph A.III.5. of this section, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

a. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate 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; and

f. Shutting down the process producing the particulate emissions.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5. In approving the site-specific monitoring plan required in paragraph A.III.3.d. of this section, the Administrator or delegated authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

6. Observations of melt shop opacity shall be performed by a certified visible emission observer as follows:

a. Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period.

b. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9.

c. Shop opacity shall be recorded for any point(s) where visible emission 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.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

7. The permittee shall either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, operate and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of +/-10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The permittee may be required to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

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

8. When the permittee is required to demonstrate compliance with the VE limitation in section A.I.2.j.ii and at any other time that the Director (the appropriate Ohio EPA District Office or local air agency) may require, either the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to A.III.7.

The permittee may petition the Director for reestablishment of these parameters whenever the permittee can demonstrate to the Administrator's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate levels for each applicable period. Operation at other than baseline values may be considered by the Director (the appropriate Ohio EPA District Office or local air agency) to be unacceptable operation and maintenance of the affected facility.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

9. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). These inspections shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion. Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Director (the appropriate Ohio EPA District Office or local air agency) to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

10. The permittee shall maintain daily records of the following for this emissions unt:

a. the tons of steel produced;

b. the number of hours the EAF was operated; and

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

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

11. The permittee shall maintain monthly records of the following information for this emissions unit:

a. the operating hours for each month;

b. during the first 12 calendar months of operation following the issuance of PTI 03-16353, the permittee shall record the cumulative numbers of the operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month numbers of the operating hours.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

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

12. The permittee shall maintain monthly records of the following information for this emissions unit:

a. the calculated PE/PM10 emissions for each month, in tons, using the following equation:

PE = (0.0050 gr/dscf) x (400,000 cfm) x (lb/7000 gr) x (60 min/hr) x (A.III.11.a) x (ton/2000 lbs);

b. beginning the first month after the 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month PE, in tons;

c. the calculated fugitive PE for each month, in tons, using the following equation:

fugitive PE = (35 lbs/hr)* x (A.III.11.a) x (ton/2000 lbs);

d. beginning the first month after the12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month fugitive PE, in tons;

e. the calculated fugitive PM10 emissions for each month, in tons, using the following equation:

fugitive PM10 emissions = (20.3 lbs/hr)* x (A.III.11.a) x (ton/2000 lbs);

f. beginning the first month after the 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month fugitive PM10 emissions, in tons;

g. the calculated SO2 emissions for each month, in tons, using the following equation:

SO2 emissions = (17.50 lbs/hr)* x (A.III.11.a) x (ton/2000 lbs);

h. beginning the first month after the 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month SO2 emission rate, in tons;

i. the calculated fugitive SO2 emissions for each month, in tons, using the following equation:

fugitive SO2 emissions = (0.18 lb/hr)* x (A.III.11.a) x (ton/2000 lbs);

j. beginning the first month after the 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month fugitive SO2 emission rate, in tons;

k. the calculated NOx emissions for each month, in tons, using the following equation:

NOx emissions = (27.72 lbs/hr)* x (A.III.11.a) x (ton/2000 lbs);

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

l. beginning the first month after 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month NOx emission rate, in tons;

m. the calculated fugitive NOx emissions for each month, in tons, using the following equation:

fugitive NOx emissions = (0.28 lb/hr)* x (A.III.11.a) x (ton/2000 lbs);

n. beginning the first month after the 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month fugitive NOx emission rate, in tons;

o. the calculated VOC emissions for each month, in tons, using the following equation:

VOC emissions = (20.02 lbs/hr)* x (A.III.11.a) x (ton/2000 lbs);

p. beginning the first month after the12 calendar months of operation, following the issuance of PTI 03-16353, the rolling, 12-month VOC emission rate, in tons;

q. the calculated fugitive VOC emissions for each month, in tons, using the following equation:

fugitive VOC emissions = (0.20 lb/hr)*x (A.III.11.a) x (ton/2000 lbs);

r. beginning the first month after the 12 calendar months of operation, the rolling, 12-month fugitive VOC emission rate, in tons;

s. the calculated CO emissions for each month, in tons, using the following equation:

CO emissions = (284.20 lbs/hr)*x (A.III.11.a) x (ton/2000 lbs);

t. beginning the first month after 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month CO emission rate, in tons;

u. the calculated fugitive CO emissions for each month, in tons, using the following equation:

fugitive CO emissions = (2.84 lbs/hr)*x (A.III.11.a) x (ton/2000 lbs);

v. beginning the first month after 12 calendar months of operation following the issuance of PTI 03-16353 , the rolling, 12-month fugitive CO emission rate, in tons;

w. the calculated Pb emissions for each month, in tons, using the following equation:

Pb emissions = (0.25 lb/hr) x (A.III.11.a) x (ton/2000 lbs);

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

x. beginning the first month after 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month Pb emission rate, in tons;

y. the calculated fugitive Pb emissions for each month, in tons, using the following equation:

fugitive Pb emissions = (0.0025 lb/hr)* x (A.III.11.a) x (ton/2000 lbs);

z. beginning the first month after 12 calendar months of operation, following the issuance of PTI 03-16353, the rolling, 12-month fugitive Pb emission rate;

aa. the calculated Hg emissions for each month, in tons, using the following equation:

Hg emissions = (0.063 lb/hr)* x (A.III.11.a) x (ton/2000 lbs);

ab. beginning the first month after 12 calendar months of operation following the issuance of PTI 03-16353, the rolling, 12-month Hg emission rate, in tons;

ac. the calculated fugitive Hg emissions for each month, in tons, using the following equation:

fugitive Hg emissions = (0.00063 lb/hr)* x (A.III.11.a) x (ton/2000 lbs); and

ad. beginning the first month after 12 calendar months of operation following the issuance of PTI 03-16353 , the rolling, 12-month fugitive Hg emission rate, in tons.

* for fugitive PE, the maximum hourly emission rate (35 lbs/hr) = 70 tons/hr (maximum capacity of EAF) x 50 lbs PE/tons of steel (emission factor from AP-42, Section 12.5 (revised 1/95) x [1- 0.99 (capture efficiency)]

for fugitive PM10, the maximum hourly emission rate (20.3 lbs/hr) = total PE (35 lbs/jr) x weight fraction of PM10 (0.58)

for NOx, the maximum hourly emission rate (27.72 lbs/hr) = 70 tons steel/hr x 0.396 lb NOx/ton (company-supplied emission factor)

for fugitive NOx, the maximum hourly emission rate (0.28 lb/hr) = 27.72 lbs NOx/hr x (1-0.99)

for SO2, the maximum hourly emission rate (17.5 lbs/hr) = 70 tons steel/hr x 0.25 lb SO2/ton (company-supplied emission factor)

for fugitive SO2, the maximum hourly emission rate (0.18 lb/hr) = 17.5 lbs SO2/hr x (1-0.99)

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

for VOC, the maximum hourly emission rate (20.02 lbs/hr) = 70 tons steel/hr x 0.286 lb VOC/ton (company-supplied emission factor)

for fugitive VOC, the maximum hourly emission rate (0.20 lbs/hr) = 20.02 lbs VOC/hr x (1-0.99)

for CO, the maximum hourly emission rate (284.20 lbs/hr) = 70 tons steel/hr x 4.06 lb CO/ton (company-supplied emission factor)

for fugitive CO, the maximum hourly emission rate (2.84 lbs/hr) = 284.20 lbs CO/hr x (1-0.99)

for Pb, the maximum hourly emission rate (0.25 lb/hr) = 70 tons steel/hr x 0.0035 lb CO/ton (company-supplied emission factor)

for fugitive Pb, the maximum hourly emission rate (0.0025 lbs/hr) = 0.25 lbs Pb/hr x (1-0.99)

for Hg, the maximum hourly emission rate (0.063 lb/hr) = 70 tons steel/hr x 0.0009 lb Hg/ton (company-supplied emission factor)

for fugitive Hg, the maximum hourly emission rate (0.00063 lbs/hr) = 0.063 lb Hg/hr x (1-0.99)

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

13. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

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

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

15. The permittee shall keep daily records that indicate whether or not scrap was handled in accordance with the permittee's "Scrap Management Program".

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that:

a. identify all exceedances of gasses which exit from the stack of the baghouse controlling the EAF and exhibit 3% opacity or greater;

b. indicate a period of excess emission for opacity observations of gasses which exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater. Excess emissions shall be reported in accordance with 40 CFR Part 60.7(c).

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.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursions) reports that identify the following:

a. all exceedances of the hourly steel throughput rate of 70 tons (based on a daily average).

b. after the first 12 calendar months of operation following the issuance of PTI 03-16353, all exceedances of the rolling, 12-month operating hours restriction of 8000 . During the first 12 calendar months of operation following the issuance of PTI 03-16353, all exceedances of the maximum allowable cumulative operating hours restrictions.

c. after the first 12 calendar months of operation following the issuance of PTI 03-16353, all exceedances of the rolling, 12-month emission limitations specified in section A.I.1 of this permit.

d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.3 of the terms and conditions of this permit.

e. all periods of time during which the scrap was not handled in accordance with the permittee's "Scrap Management Program".

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

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

3. The permittee shall submit semiannual written reports that identify operation of control system fan motor amperes at values exceeding + 15 percent of the value established under A.III.4 or operation at flow rates lower than those established under A.III.4. 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.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

4. The permittee shall submit the results of all baghouse dust analyses. The results shall be submitted within 30 days after the analysis is completed.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

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 no earlier than 12 months and no less than 6 months prior to the expiration of the current Title V permit (i.e., between May 22, 2006 and November 22, 2006).

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, NOx, CO, SO2, VOC, Pb and Hg.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for PE, Methods 1 through 4 and 5D of 40 CFR, Part 60, Appendix A; for NOx, 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 VOC, Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR, Part 60, Appendix A; Pb, Methods 1 through 4 and 12 or 29 of 40 CFR, Part 60, Appendix A; and for Hg, Methods 1 through 4 and 29 of 40 CFR, Part 60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Method 5D shall be used for positive-pressure fabric filters to determine the PE concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and the sampling time shall include an integral number of heats.

e. The test runs shall be conducted concurrently, unless inclement weather interferes.

f. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

2. During the PE testing, the permittee shall obtain the following additional information:

a. for all heats covered by the test:

i. charge weights and materials, and tap weights and materials;

ii. heat times, including start and stop times, and a log of process operation, including periods of no operation during testing.

iii. control device operation log; and

b. The control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

3. Concurrent with the PE testing, opacity observations shall be performed to demonstrate compliance with the opacity limitations contained in A.I.2.j.i and A.I.2.j.ii. The opacity testing shall be conducted in accordance with 40 CFR Part 60.8.

[40 CFR, Part 60, Subpart AAa, OAC rule 3745-77-07(C)(1) and PTI #03-16353]

V. Testing Requirements (continued)

4. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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, Northwest District Office's refusal to accept the results of the emission tests.

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

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

The report shall also include all information required by 40 CFR 60.276a(f).

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

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

5.a Emission Limitations: 0.0050 gr/dscf, 68.56 tons of PE per rolling, 12-month period

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

As long as compliance with the gr PE/dscf and the restriction on the number of hours of operation is maintained, compliance with the annual limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation* by 8,000, and then dividing by 2000 lbs/ton).

The permittee shall also demonstrate compliance with the annual allowable limitation based on the record keeping requirements established in section A.III of this permit.

* hourly limitation = (0.0050 gr PE/dscf) x [maximum volumetric flow rate (400,000 dscf)] x (1 lb/7,000 grains) x (60 minutes/hr)

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

V. Testing Requirements (continued)

5.b Emission Limitations: 140.0 tons of fugitive PE per rolling, 12-month period, 81.20 tons of fugitive PM10 per rolling, 12-month period

Applicable Compliance Method:

The annual allowable fugitive PE was established as follows:

i. Multiply the emission factor, from AP-42, Table 12.5-1 (revised 10/86), of 50 lbs PE/ton of steel by the maximum hourly capacity of the EAF (70 tons/hr).

ii. Multiply the result from i above by the capture factor of (1-0.99)*, and

iii. Multiply the result form ii by the maximum allowable number of hours of operation of 8000, and the divide by y 2000 lbs/ton.

Therefore, as long as compliance with the restriction on the number of hours of operation is maintained, compliance with the annual PE limitation shall be assumed.

The annual allowable fugitive PM10 emissions was established as follows:

i. Multiply the emission factor, from AP-42, Table 12.5-1 (revised 10/86), of 29 lbs PM10/ton of steel by the maximum hourly capacity of the EAF (70 tons/hr).

ii. Multiply the result from i above by the capture factor of (1-0.99)*, and

iii. Multiply the result form ii by the maximum allowable number of hours of operation of 8000, and the divide by y 2000 lbs/ton.

Therefore, as long as compliance with the restriction on the number of hours of operation is maintained, compliance with the annual PM10 emission limitation shall be assumed.

The permittee shall demonstrate compliance with the annual allowable emission limitations above based on the record keeping requirements established in section A.III of this permit.

* capture efficiency for the control system is assumed to be 99%

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5.c Emission Limitation: 27.72 lbs NOx/hr, 110.88 tons of NOx per rolling, 12-month period

Applicable Compliance Method:

The hourly allowable NOx emission limitation was established by multiplying the maximum capacity of the EAF (70 tons/hr) by the company-supplied emission factor of 0.396 lb NOx/ton of steel (base on a May 2004 stack testing).

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

As long as compliance with the hourly allowable NOx emission limitation and the restriction on the number of hours of operation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation by 8,000, and then dividing by 2000 lbs/ton). The permittee shall also demonstrate compliance with the annual allowable emission limitation based on the record keeping requirements established in section A.III of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

V. Testing Requirements (continued)

5.d Emission Limitations: 0.25 lb Pb/hr, 1.0 tons of Pb per rolling, 12-month period, and 0.01 ton of fugitive Pb per rolling, 12-month period

Applicable Compliance Method:

The hourly allowable Pb emission limitation was established by multiplying the maximum capacity of the EAF (70 tons/hr) by the company-supplied emission factor of 0.0035lb Pb/ton of steel (base on the May 2004 stack testing).

The permittee shall demonstrate compliance with the hourly allowable Pb emission limitation based on the results of stack testing conducted in accordance with Methods 1 - 4 and 29 of 40 CFR, Part 60, Appendix A.

As long as compliance with the hourly allowable Pb emission limitation and the restriction on the number of hours of operation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation by 8,000, and then dividing by 2000 lbs/ton).

The annual allowable fugitive Pb emission limitation was established by multiplying the annual allowable Pb emission limitation by 1(- 0.99)*.

The permittee shall also demonstrate compliance with the annual allowable emission limitation above based on the record keeping requirements established in section A.III of this permit.

* capture efficiency for the control system is assumed to be 99%

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5.e Emission Limitations: 0.063 lb Hg/hr, 0.25 ton of Hg per rolling, 12-month period, and 0.0025 ton of fugitive Hg per rolling, 12-month period

Applicable Compliance Method:

The hourly allowable Hg emission limitation was established by multiplying the maximum capacity of the EAF (70 tons/hr) by the company-supplied emission factor of 0.0009 lb Hg/ton of steel (base on the December 1999 stack testing).

The permittee shall demonstrate compliance with the hourly allowable Hg emission limitation based on the results of stack testing conducted in accordance with Methods 1 - 4 and 29 of 40 CFR, Part 60, Appendix A.

As long as compliance with the hourly allowable Hg emission limitation and the restriction on the number of hours of operation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation by 8,000, and then dividing by 2000 lbs/ton).

The annual allowable fugitive Hg emission limitation was established by multiplying the annual allowable Hg emission limitation by 1(- 0.99)*.

The permittee shall also demonstrate compliance with the annual allowable emission limitation above based on the record keeping requirements established in section A.III of this permit.

* capture efficiency for the control system is assumed to be 99%

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

V. Testing Requirements (continued)

5.f Emission Limitation: 17.50 lbs SO2/hr, 70.0 tons of SO2 per rolling, 12-month period, and 0.70 ton of fugitive SO2 per rolling, 12-month period

Applicable Compliance Method:

The hourly allowable SO2 emission limitation was established by multiplying the maximum capacity of the EAF (70 tons/hr) by the company-supplied emission factor of 0.25 lb SO2/ton of steel (base on the September 1999 stack testing).

The permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation based on the results of stack testing conducted in accordance with Methods 1 - 4 and 29 of 40 CFR, Part 60, Appendix A.

As long as compliance with the hourly allowable SO2 emission limitation and the restriction on the number of hours of operation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation by 8,000, and then dividing by 2000 lbs/ton).

The annual allowable fugitive SO2 emission limitation was established by multiplying the annual allowable SO2 emission limitation by 1(- 0.99)*.

The permittee shall also demonstrate compliance with the annual allowable emission limitation above based on the record keeping requirements established in section A.III of this permit.

* capture efficiency for the control system is assumed to be 99%

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5.g Emission Limitation: 20.02 lbs VOC/hr, 80.08 tons of VOC per rolling, 12-month period, and 0.80 ton of fugitive VOC per rolling, 12-month period

Applicable Compliance Method:

The hourly allowable VOC emission limitation was established by multiplying the maximum capacity of the EAF (70 tons/hr) by the company-supplied emission factor of 0.286 lb VOC/ton of steel (base on the September 1999 stack testing).

The permittee shall demonstrate compliance with the hourly allowable VOC emission limitation based on the results of stack testing conducted in accordance with Methods 1 - 4 and 29 of 40 CFR, Part 60, Appendix A.

As long as compliance with the hourly allowable VOC emission limitation and the restriction on the number of hours of operation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation by 8,000, and then dividing by 2000 lbs/ton).

The annual allowable fugitive VOC emission limitation was established by multiplying the annual allowable VOC emission limitation by 1(- 0.99)*.

The permittee shall also demonstrate compliance with the annual allowable emission limitation above based on the record keeping requirements established in section A.III of this permit.

* capture efficiency for the control system is assumed to be 99%

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

V. Testing Requirements (continued)

5.h Emission Limitation: 284.20 lbs CO/hr, 1136.80 tons of CO per rolling, 12-month period, and 11.37 tons of fugitive CO per rolling, 12-month period

Applicable Compliance Method:

The hourly allowable CO emission limitation was established by multiplying the maximum capacity of the EAF (70 tons/hr) by the company-supplied emission factor of 4.06 lbs CO/ton of steel (base on the May 2004 stack testing).

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation based on the results of stack testing conducted in accordance with Methods 1 - 4 and 29 of 40 CFR, Part 60, Appendix A.

As long as compliance with the hourly allowable CO emission limitation and the restriction on the number of hours of operation is maintained, compliance with the annual emission limitation shall be assumed (the annual limitation was developed by multiplying the hourly limitation by 8,000, and then dividing by 2000 lbs/ton).

The annual allowable fugitive CO emission limitation was established by multiplying the annual allowable CO emission limitation by 1(- 0.99)*.

The permittee shall also demonstrate compliance with the annual allowable emission limitation above based on the record keeping requirements established in section A.III of this permit.

* capture efficiency for the control system is assumed to be 99%

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5.i Emission Limitation: 3% opacity from the exit of the EAF baghouse

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible emissions limitation above pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5.j Emission Limitation: 6% opacity from the exits of the melt shop due solely to the operation of the EAF

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible emissions limitation above pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

5.k Emission Limitation: There shall be no visible emissions from the building enclosing the baghouse dust handling system.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible emissions limitation above pursuant to Method 22 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-16353]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
70 tons/hr electric arc furnace with baghouse and dust handling system	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Mercury
TLV (ug/m3): 25
Maximum Hourly Emission Rate (lbs/hr): 0.063 (point source emissions + fugitive emissions)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.60
MAGLC (ug/m3): 0.60

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

2. 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:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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

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.).

3. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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. description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of the 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 runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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