



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

7/22/2015

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: Nucor Steel Marion, Inc.
Facility ID: 0351010017
Permit Type: Renewal
Permit Number: P0112447

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-2835 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

A handwritten signature in black ink that reads "Michael E. Hopkins".

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA DAPC, Northwest District Office



PROPOSED

Division of Air Pollution Control Title V Permit for Nucor Steel Marion, Inc.

Facility ID:	0351010017
Permit Number:	P0112447
Permit Type:	Renewal
Issued:	7/22/2015
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Title V Permit
for
Nucor Steel Marion, Inc.

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Proposed Title V Permit
Nucor Steel Marion, Inc.
Permit Number: P0112447
Facility ID: 0351010017

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0351010017
Facility Description: Steel Mill
Application Number(s): A0046342, A0052530
Permit Number: P0112447
Permit Description: Renewal Title V operating permit for a steel mill.
Permit Type: Renewal
Issue Date: 7/22/2015
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0087311

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Nucor Steel Marion, Inc.
912 Cheney Avenue
Marion, OH 43301-1801

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. 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, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Proposed Title V Permit
Nucor Steel Marion, Inc.
Permit Number: P0112447
Facility ID: 0351010017

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. 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 C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) 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:
- (1) 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 by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) 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 submitted scheduled maintenancerequests, 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))

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions 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 submitted promptly to the Ohio EPA DAPC, Northwest District Office. Except as provided below, the written reports shall be submitted 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 Standard 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 Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

- (3) 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 Standard Term and Condition A.2)c)(2) 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; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northwest District Office 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 section B. Facility-Wide Terms and Conditions 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 Standard Term and Condition A.2.c)(2) 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))

- (4) 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northwest District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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 Standard Term and Condition A.2.c)(1) above.

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

4. 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))

5. 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))

6. 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))

7. General Requirements

- a) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 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 when:
 - (1) 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
 - (2) 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
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. 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))

8. 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))

9. 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))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. 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))

12. 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))

13. 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:
- (1) 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.
 - (2) 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.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) 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 Ohio EPA DAPC, Northwest District Office 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) 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 Ohio EPA DAPC, Northwest District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.



- b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) 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))

14. 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))

15. 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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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))

16. 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))

17. 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))

18. 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 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

20. 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))

21. 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))

22. 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.

Unless otherwise exempted, no emissions unit identified in this permit that has been 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)

23. 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 operating 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))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

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 Ohio EPA DAPC, Northwest District Office.
- 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 Ohio EPA DAPC, Northwest District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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 Ohio EPA DAPC, Northwest District Office 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).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

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

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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 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 Standard Term and Condition A.2.c)(2); 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 potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



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Facility ID: 0351010017

Effective Date: To be entered upon final issuance

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northwest District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



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B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) None.

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

[40 CFR Part 64]

3. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

EU ID	Operations, Property and/or Equipment Description
F003	Slag Quenching in total enclosure [PTI# P0110974]
F004	Drop balling material load-in/out [PTI# P0110974]
F005	Slag storage piles [PTI# P0110974]
P005	Natural gas fired ladle preheater (7.5 mmBtu/hr) [PTI# P0110186]
P007	Natural gas fired tundish preheater (4 mmBtu/hr) [PTI# P0110186]
P012	Natural gas fired ladle preheater (7.5 mmBtu/hr) [PTI# P0110186]
P013	Natural gas fired ladle preheater (8 mmBtu/hr) [PTI# P0110186]
P014	Natural gas fired ladle preheater (8 mmBtu/hr) [PTI# P0110186]
P015	Natural gas fired tundish preheater (4 mmBtu/hr)[PTI# P0110186]
P025	Standby diesel-fired 100-kw generator used for the reheat furnace
P030	350 Kw standby generator for casting machine

[OAC rule 3745-77-07(C)(1)]



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C. Emissions Unit Terms and Conditions



1. F001, Vehicular Traffic

Operations, Property and/or Equipment Description:

Plant roadways and parking areas

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20 (PTI #P0105283, issued 12/23/2010)	Fugitive particulate emissions (PE)*: 30.64 tons per rolling, 12-month period Fugitive particulate matter 10 microns or less in size (PM10): 5.93 tons per rolling, 12-month period <u>Paved Roadways:</u> No visible PE, except for one minute during any 60-minute period. <u>Unpaved Roadways:</u> no visible PE, except for three minutes during any 60-minute period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See b)(2)a. and b(2)d. through b)(2)h.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (P0105283, issued 12/23/2010)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 (P0105283, issued 12/23/2010)	See b)(2)c.
d.	OAC rule 3745-17-07(B)	See b)(2)i.
e.	OAC rule 3745-17-08(B)	See b)(2)j.

*PE is inclusive of PM10.



(2) Additional Terms and Conditions

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

Pollutant	BACT Requirements
PM10/PE	Best available control measures – speed reduction, good housekeeping practices, watering, resurfacing, and/or chemical stabilization
	No visible PE, except for one minute during any 60-minute period from any paved roadway/parking area.
	No visible PE, except for three minutes during any 60-minute period from any unpaved roadway/parking area.

*PE is inclusive of PM10.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit for PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-10 through 3745-31-20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the PM10 emissions from this air contaminant source since the potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

- d. The paved and unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:
 - i. all paved and unpaved roadways and parking areas
- e. The permittee shall employ best available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with speed reduction, good housekeeping practices, watering, resurfacing, and/or chemical stabilization at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.
- f. Any unpaved roadway or parking area which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces.

Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas.

Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions, except for one minute during any 60-minute period.

- g. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- h. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- i. Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.



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

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each roadway and parking area in accordance with the following frequencies:

roadways and parking areas:	minimum inspection frequency
all paved and unpaved roads and parking areas	once per day of operation

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

(3) The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

30.64 tons fugitive PE per rolling, 12- month period
5.93 tons fugitive PM10 per rolling, 12-month period

Applicable Compliance Method:

Compliance with the emission limitations above shall be determined by using the emission factor equations in Section 13.2.2 of Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways [Section 13.2.1 for paved roadways]. Should further updates in AP-42 occur, the most current equations shall be used. These emission limits were based on a maximum vehicle miles travelled of 8,375 miles/year, and an 80% control efficiency for the reduction of fugitive emissions.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

b. Emission Limitations:

No visible fugitive PE from unpaved roadways and parking areas, except for a period of time not to exceed three minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed above shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22 of 40 CFR Part 60 Appendix A.



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[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

c. Emission Limitations:

No visible fugitive PE from paved roadways and parking areas, except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed above shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22 of 40 CFR Part 60 Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

g) Miscellaneous Requirements

(1) None.



2. F002, Z014

Operations, Property and/or Equipment Description:

Scrap steel storage piles

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20 (PTI #P0105283, issued 12/23/2010)	Fugitive particulate emissions (PE)*: 0.43 ton per rolling, 12-month period Fugitive particulate matter 10 microns or less in size (PM10): 0.22 ton per rolling, 12-month period Fugitive particulate matter 2.5 microns or less in size (PM2.5): 0.06 ton per rolling, 12-month period Visible emissions restrictions [see b)(2)g.] Best available control measures that are sufficient to eliminate visible PE of fugitive dust [See b)(2)d. through b)(2)g.]
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 PTI #P0105283, issued 12/23/2010	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 PTI #P0105283, issued 12/23/2010	See b)(2)c.
d.	OAC rule 3745-17-07(B)	See b)(2)h.
e.	OAC rule 3745-17-08(B)	See b)(2)i.

*PE is inclusive of PM2.5/PM10.

**PM10 is inclusive of PM2.5.



(2) Additional Terms and Conditions

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

Pollutant	BACT Requirements
PM2.5 PM10 PE	Best available control measures – minimizing drop height
	Visible limitations not to exceed 20% opacity as a 3-minute average for truck unloading of scrap and 10% opacity as a 6-minute average for all other storage pile/scrap handling

*PE is inclusive of PM2.5/PM10.

**PM10 is inclusive of PM2.5.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit for PM2.5/PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-10 through 3745-31-20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the PM2.5/PM10 emissions from this air contaminant source since the potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as



total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

- d. The permittee shall employ best available control measures meeting BACT requirements for the Scrap Storage Piles and scrap handling operations (emissions unit F002). BACT has been determined to be the following; minimizing drop height as well as compliance with sections b)(2)e. through f. below:
- e. The permittee shall employ best available control measures for all storage pile and scrap handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to the following control measures to ensure compliance:

Storage Pile/Scrap Handling Operation	Control Measures
truck unloading of scrap	none - the inherent nature of the scrap material in the storage pile(s) will comply with the applicable requirements.
railcar unloading of scrap	minimize drop height
transfer of scrap from storage pile to storage pile by use of grapple and/or "mag" crane	minimize drop height
charge bucket loading	minimize drop height
wind erosion from scrap storage piles	none – the inherent nature of the scrap material in the storage pile(s) will comply with the applicable requirements.

Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

- f. The above-mentioned control measure(s) shall be employed for storage pile/scrap handling operations at all times.
- g. The permittee shall not cause to be discharged into the atmosphere, fugitive particulate emissions which exhibit greater than the following:

Storage Pile/Scrap Handling Operation	Opacity Limitation
truck unloading of scrap	20%, as a 3-minute average
railcar unloading of scrap	10%, as a 6-minute average
transfer of scrap from storage	10%, as a 6-minute average



Storage Pile/Scrap Handling Operation	Opacity Limitation
pile to storage pile by use of grapple and/or "mag" crane	
charge bucket loading	10%, as a 6-minute average
wind erosion from scrap storage piles	10%, as a 6-minute average

- h. Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.
 - i. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), the emissions unit is exempt from the requirements of OAC rule 3745-17-08.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the following storage pile/scrap handling operation:
 - a. truck unloading of scrap;
 - b. railcar unloading of scrap;
 - c. transfer of scrap from storage pile to storage pile;
 - d. charge bucket loading; and
 - e. wind erosion from all scrap storage piles;

The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- f. the location and color of the emissions;
- g. whether the emissions are representative of normal operations;
- h. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- i. The total duration of any visible emissions incident; and
- j. Any corrective actions taken to minimize or eliminate the visible emissions.



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

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that:

- a. identify all days during which any visible emissions were observed from storage pile/scrap handling operations;
- b. describe any corrective actions taken to minimize or eliminate the visible emissions.

These quarterly reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

- 0.43 ton fugitive PE per rolling, 12-month period
- 0.22 ton fugitive PM10 per rolling, 12-month period
- 0.06 ton fugitive PM2.5 per rolling, 12-month period

Applicable Compliance Method:

Compliance with fugitive limitations above for PE, PM10 and PM2.5 shall be determined by multiplying the following AP-42 emission factors (Table 12.5-4, 10/86) by a maximum scrap throughput of 722,700 tons and a maximum of (4) handling operations, and then dividing by 2000 lbs/ton:



AP-42 Emission Factors

PE: 0.0003 lb/ton

PM10: 0.00015 lb/ton

PM2.5: 0.000043 lb/ton

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

b. Emission Limitation:

Visible emissions from truck unloading of scrap shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 (Standards of Performance for New Stationary Sources") and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

c. Emission Limitation:

Visible emissions from the following storage pile/scrap handling operations shall not exceed 10% opacity as a 6-minute average:

- i. railcar unloading of scrap;
- ii. transfer of scrap from storage pile to storage pile;
- iii. charge bucket loading; and
- iv. wind erosion from scrap storage piles.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 (Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

g) Miscellaneous Requirements

- (1) None.



3. P009, Rolling Mill/Reheat Furnace

Operations, Property and/or Equipment Description:

Natural gas fired steel billet reheat furnace

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) b)(1)h., and d)(7).
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20 (PTI #P0110429, issued 1/13/2014)	Nitrogen oxides (NOx): 0.15 pound per mmBtu heat input and 120.89 tons per rolling, 12-month period Carbon monoxide (CO): 0.084 pound per mmBtu and 67.70 tons per rolling, 12-month period Particulate matter 2.5/10 microns or less in size (PM2.5/PM10)*: 0.0075 pound per mmBtu heat input and 6.04 tons per rolling, 12-month period Volatile organic compounds (VOC): 0.0054 pound per mmBtu heat input and 4.35 tons per rolling, 12-month period Sulfur dioxide (SO2): 0.0006 pound per mmBtu heat input and 0.48 ton per rolling 12-month period See b)(2)b.
b.	ORC 3704.03(T)(4)	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI #P0110429, issued 1/13/2014)	See b)(2)d.
d.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)e.



Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(PTI #P0110429, issued 1/13/2014)	
e.	OAC rule 3745-17-07(A)	See b)(2)f.
f.	OAC rule 3745-17-11(B)	See b)(2)g.
g.	OAC rule 3745-18-06(E)	See b)(2)h.
h.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(7).

*All emissions of particulate matter are from natural gas combustion and are less than 1 micron in diameter.

(2) Additional Terms and Conditions

- a. The NOx and CO emissions limitations apply at all times during operation including startup, shutdown, ramp up, cool down, idling, etc.
- b. The permittee shall employ best available control technology (BACT) for this emissions unit. BACT has been determined to be the following:

Pollutant	BACT Requirements
PM2.5	Use of natural gas for reheat furnace operations.
	Emission standard of 0.0075 lb PM2.5/PM10* per mmBtu heat input.
PM10	The BACT analysis determined that no add-on controls were cost-effective for the reduction of PM2.5/PM10.
SO2	Use of natural gas for reheat furnace operations.
	Emission standard of 0.0006 lb SO2 per mmBtu heat input.
CO	The BACT analysis determined that no add-on controls were cost-effective for the reduction of SO2.
	Use of natural gas for reheat furnace operations.
	Emission standard of 0.084 pound per mmBtu heat input.
NOx	The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
	Use of natural gas low NOx burners.
	Emission standard of 0.15 pound per mmBtu heat input.
VOC	The BACT analysis determined that no add-on controls were cost-effective for the reduction of NOx.
	Use of natural gas for reheat furnace operations.
	Emission standard of 0.0054 lb VOC per mmBtu heat input.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of VOC.

*All emissions of particulate matter from natural gas combustion are less than 1 micron in diameter.

- c. The BAT requirements under ORC 3704.03(T) have been determined to be compliance with the pound per hour limitations for NOx and CO established pursuant to OAC rules 3745-31-10 through 3745-31-20.

- d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit for VOC. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20 for NO_x and CO; therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit for NO_x and CO.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-10 through 3745-31-20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

- e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the PM_{2.5}/PM₁₀, VOC, and SO₂ emissions from this air contaminant source since the uncontrolled potential to emit (PTE) for PM_{2.5}/PM₁₀, VOC, and SO₂ is each less than 10 tons per year.

- f. 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.

- g. The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

- h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

c) **Operational Restrictions**

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

[OAC rule 3745-77-07(A)(1) and PTI #P0110429]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in the emissions unit(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the air/fuel ratio for each individual gas-air flow regulator utilized in the furnace during all periods of operation (including startup, shutdown, ramp up, cool down, idling, etc.). Following compliance testing, the permittee shall collect and record the following when this emissions unit is in operation:

- a. for each individual gas-air flow regulator, the average of all recorded air/fuel ratio readings for each rolling, 60-minute period.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (3) The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable operating parameters above shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (4) The monitor for each individual gas-air flow regulator shall meet the following data availability requirements:

- a. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration check and zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (and shall collect data at required intervals) at all times that the emissions unit is operating.
- b. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- c. The minimum degree of data availability for each monitor (i.e. for each individual gas-air flow regulator) shall be at least 90%, based on a monthly calculation of the operating time of the monitor. The calculation of data availability shall exclude monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments).
- d. (For example: May has 31 days, or 744 hours. If monitoring malfunctions, associated repairs, and required quality assurance or control activities (including

calibration checks and required zero and span adjustments) equated to 48 hours for an individual monitor, then the 90% standard should be evaluated against 696 hours.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (5) The permittee shall maintain the following information each month as part of compliance with the "General recordkeeping requirements" under 40 CFR 64.9(b)(1):
- a. hours of operation of the emissions unit;
 - b. for each individual monitor while the emissions unit was in operation:
 - i. hours of monitor operation;
 - ii. hours of monitor downtime [d)(5)a. minus d)(5)b.i.];
 - iii. hours of monitor downtime due to monitor malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments);
 - iv. percentage (%) of data availability calculated by the following:
$$\{d)(5)b.i. - [d)(5)b.ii. - d)(5)b.iii.]\}/100$$

In addition to the records above, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64.9 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (6) Whenever the monitored value for any parameter varies from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the excursion.
- a. The permittee shall maintain records of the following information for each investigation:
 - i. the date and time the excursion began;
 - ii. the magnitude of the excursion at that time;
 - iii. the date the investigation was conducted;
 - iv. the name(s) of the personnel who conducted the investigation; and
 - v. the findings and recommendations.



- b. In response to each required investigation to determine the cause of an excursion, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary.
 - i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:
 - (a) the reasons for that determination; and
 - (b) the date and time the excursion ended.
 - ii. The permittee shall maintain records of the following information for each corrective action taken:
 - (a) a description of the corrective action;
 - (b) the date the corrective action was completed;
 - (c) the date and time the excursion ended;
 - (d) the total period of time (in minutes) during which there was an excursion;
 - (e) the air/fuel ratio reading, immediately after the corrective action was implemented; and
 - (f) the name(s) of the personnel who performed the work.
- c. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.
- d. These range(s) and/or limit(s) for the operating parameters above are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the operating parameters above based upon information obtained during future performance tests that demonstrate compliance with the allowable NOx and CO emission rates for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated (if necessary) into this permit by means of an administrative modification.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (7) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because this permit action does not involve an increase in any toxic air contaminant, as defined in OAC rule 3745-114-01, greater than

1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[PTI #P0110429]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- (2) The permittee shall submit quarterly excursion and deviation reports that identify the excursions in e)(2)a. and the deviations in e)(2)b through e)(2)e.:
 - a. each period of time (start time and date, and end time and date) when the following operating parameter(s) were outside the appropriate range or limit specified by the manufacturer or outside of the acceptable range for each parameter following any required compliance demonstration:
 - i. for each individual gas-air flow regulator, the average air/fuel ratio based on each rolling, 60-minute period.
 - b. each incident of excursion described above where a prompt investigation was not conducted;
 - c. each incident of excursion described above where prompt corrective action, that would bring the following into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken;
 - d. each incident of excursion described above where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and recordkeeping requirements of this permit;
 - e. each incident of deviation where a monitor for an individual gas-air flow regulator failed to achieve a 90% data availability requirement during a calendar month;

The quarterly excursion and deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

f) 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 approximately 6 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the:
 - i. 0.084 CO per mmBtu heat input; and
 - ii. 0.15 lb NOx per mmBtu heat input.
- c. The following test methods shall be employed to demonstrate compliance:
 - i. for the allowable CO emission rate: Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.
 - ii. for the allowable NOx emission rate: Methods 1 through 4, and 7 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 test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the Ohio EPA, Northwest District Office. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

For the reheat furnace a single MSOR does not exist for emissions of both NOx and CO. MSOR for NOx testing would consist of operating the furnace at its maximum material/input rate as indicated above. MSOR for CO testing would involve operation of the furnace at a low temperature (i.e., from a cold start condition, a ramp up, idling, or a startup after the furnace was shutdown, etc.).

- e. The permittee shall perform emissions testing for both NOx and CO under the MSOR associated with NOx within 6 months of expiration of this permit as indicated in f)(1)a., f)(1)b., and f)(1)c. above.
- f. 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).



- g. 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.
- h. 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 #P0110429]

- (2) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitations:

0.15 lb NO_x/mmBtu heat input and 120.89 tons NO_x per rolling, 12-month period

Applicable Compliance Method:

Compliance with the lb/mmBtu heat input NO_x emission limitation shall be demonstrated through the emission testing requirements contain in f)(1).

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

- b. Emission Limitations:

0.084 lb CO/mmBtu heat input and 67.70 tons CO per rolling, 12-month period

Applicable Compliance Method:

Compliance with the lb/mmBtu heat input CO emission limitation shall be demonstrated through the emission testing requirements contained in f)(1).

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]



c. Emission Limitations:

0.0006 pound SO₂ per mmBtu heat input and 0.48 ton SO₂ per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation shall be demonstrated by dividing an AP-42, Chapter 1.4 (7/98) emission factor of 0.6 pound of SO₂/mmft³ by a heat content of 1,020 Btu/ft³ on natural gas.

If required, the permittee shall demonstrate compliance through emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]

d. Emission Limitations:

0.0075 pound PM_{2.5}/PM₁₀ per mmBtu heat input and 6.04 tons PM_{2.5}/PM₁₀ per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation shall be demonstrated by dividing an AP-42, Chapter 1.4 (7/98) emission factor of 7.6 pound of PM_{2.5}/PM₁₀ per mmft³ by a heat content of 1,020 Btu/ft³ on natural gas.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A and Methods 201/201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0110429]



Proposed Title V Permit
Nucor Steel Marion, Inc.
Permit Number: P0112447
Facility ID: 0351010017

Effective Date: To be entered upon final issuance

e. Emission Limitations:

0.0054 pound VOC per mmBtu heat input and 4.35 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation shall be demonstrated by dividing an AP-42, Chapter 1.4 (7/98) emission factor of 5.5 pound of VOC/mmft³ by a heat content of 1,020 Btu/ft³ on natural gas.

If required, the permittee shall demonstrate compliance through emissions testing conducted in accordance with Methods 1-4 and 18, 25, or 25A, as applicable, of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0100429]

g) Miscellaneous Requirements

(1) None.



4. P010, Z022

Operations, Property and/or Equipment Description:

Contact cooling tower (Rolling Mill Pond)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(2) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20 (PTI #P0105283, issued 12/23/10)	Particulate matter 2.5/10 microns or less in size (PM2.5/PM10)*: 0.07 pound per hour and 0.32 tons per rolling, 12-month period Particulate emissions (PE)**: 0.46 pound per hour and 2.01 tons per rolling, 12-month period Visible PE shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI #P0105283, issued 12/23/10)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 (PTI #P0105283, issued 12/23/10)	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.

*All emissions of particulate matter are considered to be PM2.5 or less.

**PE is inclusive of PM2.5/PM10.

(2) Additional Terms and Conditions

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



Pollutant	BACT Requirements
PM2.5 PM10 PE	A drift eliminator achieving "drift loss" equal to or less than 0.005 percent;
	Mass emission rates of: 0.07 lb PM2.5/PM10 per hour and 0.46 lb PE per hour
	Visible PE shall not exceed 10% opacity, as a six-minute average.

*All emissions of particulate matter are considered to be PM2.5 or less.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit for PM2.5/PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-10 through 3745-31-20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the PM2.5/PM10 emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.



- d. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

c) Operational Restrictions

- (1) The permittee shall maintain the total dissolved solids (TDS) content of the circulating cooling water at 2,650 mg/L or less.

[OAC rule 3745-77-07(A)(1) and PTI #P0105283]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform the following monitoring and recordkeeping for the cooling tower:

- a. The permittee shall test and record the total dissolved solids content (mg/l) of the cooling water a minimum of once per week using a conductivity meter or other USEPA-approved test procedures.
- b. After each test for total dissolved solids content, the permittee shall calculate and record the average total dissolved solids content value based on the four most current readings from d)(1)a. above.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the TDS content requirement, based upon an average.

These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:

0.07 pound PM2.5/PM10 per hour and 0.32 tons PM2.5/PM10 per rolling, 12-month period.



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Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (225,000 gallons/hr) and by the maximum TDS content (2,650 mg/L), a 0.16 PM_{2.5}/PM₁₀ fraction*, and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

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

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

*Reference - "Calculating Realistic PM₁₀ Emissions from Cooling Towers, Abstract No. 216, Session No. AM-1b, Greystone Environmental Consultants, Inc., 650 University Avenue, Suite 100, Sacramento, California 95825, June 2001.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

b. Emission Limitations:

0.46 pound PE per hour and 2.01 tons PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (225,000 gallons/hr) and by the maximum TDS content (2,650 mg/L), and, then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

c. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").



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[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

g) Miscellaneous Requirements

(1) None.



5. P011, Z023

Operations, Property and/or Equipment Description:

Contact cooling tower (Meltshop Spray)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20 (PTI #P0105283, issued 12/23/10)	Particulate matter 2.5/10 microns or less in size (PM2.5/PM10)*: 0.04 pound per hour and 0.15 ton per rolling, 12-month period Particulate emissions (PE)**: 0.22 pound per hour and 0.96 ton per rolling, 12-month period Visible PE shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI #P0105283, issued 12/23/10)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 (PTI #P0105283, issued 12/23/10)	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.

*All emissions of particulate matter are considered to be PM2.5 or less.

**PE is inclusive of PM2.5/PM10.

(2) Additional Terms and Conditions

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



Pollutant	BACT Requirements
PM2.5 PM10 PE	A drift eliminator achieving "drift loss" equal to or less than 0.005 percent;
	Mass emission rates of: 0.04 lb PM2.5/PM10 per hour and 0.22 lb PE per hour
	Visible PE shall not exceed 10% opacity, as a six-minute average.

*All emissions of particulate matter are considered to be PM2.5 or less.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit for PM2.5/PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-10 through 3745-31-20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the PM2.5/PM10 emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.



- d. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
 - e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
- c) Operational Restrictions
- (1) The permittee shall maintain the total dissolved solids (TDS) content of the circulating cooling water at 2,650 mg/L or less.

[OAC rule 3745-77-07(A)(1) and PTI #P0105283]
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform the following monitoring and recordkeeping for the cooling tower:
 - a. The permittee shall test and record the total dissolved solids content (mg/l) of the cooling water a minimum of once per week using a conductivity meter or other USEPA-approved test procedures.
 - b. After each test for total dissolved solids content, the permittee shall calculate and record the average total dissolved solids content value based on the four most current readings from d)(1)a. above.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the TDS content requirement based upon an average.

These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]
- f) Testing Requirements
- (1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitations:

0.04 pound PM_{2.5}/PM₁₀ per hour and 0.15 ton PM_{2.5}/PM₁₀ per rolling, 12-month period.



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Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (198,360 gallons/hr) and by the maximum TDS content (2,650 mg/L), a 0.16 PM2.5/PM10 fraction*, and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

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

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

*Reference - "Calculating Realistic PM10 Emissions from Cooling Towers, Abstract No. 216, Session No. AM-1b, Greystone Environmental Consultants, Inc., 650 University Avenue, Suite 100, Sacramento, California 95825, June 2001.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

b. Emission Limitations:

0.22 pound PE per hour and 0.96 ton PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (198,360 gallons/hr) and by the maximum TDS content (2,650 mg/L), and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

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

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

c. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a six-minute average.



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Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI #P0105283]

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group – Significant Meltshop Operations: P004 and P903

EU ID	Operations, Property and/or Equipment Description
P004	Continuous casting operations (including torch cutting)
P903	Electric arc furnace operations (including charging, melting, tapping, slag skimming/handling, etc.)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) b)(1)l., and d)(9).
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20 (PTI #P0110186, issued 6/21/12)	See b)(2)a. Combined meltshop emission limitations* for emissions units P004, P005, P007, P012, P013, P014, P015, and P903: Particulate matter 10 microns or less in size (PM10): 0.0052 gr/dscf and 115.63 tons per rolling, 12-month period Particulate matter 2.5 microns or less in size (PM2.5): 0.0049 gr/dscf and 108.96 tons per rolling, 12-month period Lead (Pb): 0.002 pound per ton of steel produced and 0.657 ton per rolling, 12-month period Sulfur dioxide (SO2): 0.5 pound per ton of steel produced and 164.25 tons per rolling, 12-month period Carbon monoxide (CO): 2.32 pounds per ton of steel produced and 761.25 tons per rolling, 12-month period



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Nitrogen dioxides (NOx): 0.43 pound per ton of steel produced and 141.58 tons per rolling, 12-month period Volatile organic compounds (VOC): 0.13 pound per ton of steel produced and 42.71 tons per rolling, 12-month period Mercury (Hg): 0.00033 lb/ton of steel produced and 0.108 ton per rolling, 12-month period See b)(2)a.
b.	ORC 3704.03(T)	See b)(2)b.
d.	OAC rule 3745-17-11(B)	See b)(2)c.
e.	OAC rule 3745-17-07(A)	See b)(2)d.
f.	OAC rule 3745-17-08(A)	See b)(2)e.
g.	OAC rule 3745-17-07(B)	See b)(2)f.
h.	OAC rule 3745-18-06(E)	See b)(2)g.
i.	40 CFR Part 60, Subpart AAa 40 CFR 60.270a – 60.276a 40 CFR Part 60, Subpart A 40 CFR 60.1 - 19	See b)(2)h.
j.	MACT, Subpart YYYYY 40 CFR 63.10680 – 63.10690	See b)(2)i.
k.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart YYYYY – Applicability of General Provisions to Subpart YYYYY specifies the applicable General Provisions from 40 CFR 63.1 – 63.15.
l.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(7).
m.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(8) through d)(13), e)(2)c., e)(2)d., and g)(3).

*The combined limitations shall be based on meltshop emissions from 2 stacks - the stack of the baghouse control system serving the meltshop operations and a stack serving emissions units P013 and P014 which exhausts directly to the atmosphere.

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control technology (BACT) for meltshop operations (emissions units P004, P005, P007, P012, P013, P014, P015, and P903). BACT has been determined to be the following:

Pollutant	BACT Requirements
PM2.5 PM10 Pb	Building enclosure (meltshop) equipped with a canopy hood/baghouse system capable of achieving 100% capture of all emissions within the meltshop building*.
	Direct-shell evacuation control (DEC) vented to baghouse for EAF (emissions unit P903)
	Maximum outlet concentration(s) from the baghouse of: 0.0049 gr PM2.5/dscf; 0.0052 gr PM10/dscf.
	Visible PE from the baghouse stack serving the meltshop shall not exhibit 3 percent (3%) opacity or greater, as a six-minute average
	0 percent (0%) opacity for visible fugitive particulate emissions from the meltshop building.
	Scrap management plan to reduce Pb emissions and emission standard of 0.002 lbPb per ton of steel produced
SO2	Emission standard of 0.5 lb per ton of steel produced.
	Use of natural gas for the continuous casting operations (emissions unit P004) and ladle and tundish preheaters.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of SO2.
CO	Emission standard of 2.32 lb per ton of steel produced.
	DEC control – CO captured by the DEC is oxidized at the air gap between the DEC elbow and DEC duct.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
NOx	Emission standard of 0.43 lb per ton of steel produced.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of NOx.
VOC	Scrap management plan to reduce VOC emissions and emission standard of 0.13 lb per ton of steel produced.
Hg	Scrap management plan to reduce Hg emissions and an emission standard of 0.00033 lb Hg per ton of steel produced.

The maximum outlet concentrations and emission standards presented in the table above apply to the combined emissions from all meltshop operations. Compliance with the combined limitations shall be based on meltshop emissions from the stack of the baghouse control system serving the meltshop operations and the stack serving emissions units P013 and P014 which exhausts directly to the atmosphere.

- b. The BAT requirements under ORC 3704.03(T) have been determined to be compliance with the gr/dscf emission limitations for PM10, PM2.5, & - and compliance with the lb/ton emission limitations for SO2, NOx, VOC, Pb & CO established pursuant to OAC rules 3745-31-10 through 3745-31-20.

- c. The emission limitation specified by this rule is less stringent than the combined PM10 emission limitation established for meltshop operations pursuant to OAC rules 3745-31-10 through 3745-31-20. It should be noted that all emissions or particulate matter are PM10. PM10 emissions are inclusive of PM2.5.
 - d. The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
 - e. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), the meltshop operations are exempt from the requirements of OAC rule 3745-17-08.
 - f. Meltshop operations are exempt from the visible PE limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B) (11) (e).
 - g. For emissions unit P004 and P903, the SO2 emission limitations specified by this rule for each emissions unit is less stringent than the SO2 emissions that these emissions units contribute to the combined, melt shop limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.
 - h. The emission limitations specified by this rule are equivalent to or less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
 - i. The emission limitations, control measures, and requirements, with the exception of the scrap management plan, specified by this rule are equivalent to or less stringent than the emission limitations, control measures, and requirements established pursuant to OAC rules 3745-31-10 through 20.
- c) Operational Restrictions
- (1) The permittee shall not exceed 1,800 tons of steel production per day from the electric arc furnace, emissions unit P903, based on a monthly average.

[OAC rule 3745-77-07(A)(1) and PTI #P0110186]
 - (2) The permittee shall follow the procedures outlined in its "Scrap Management Program" in order to minimize the use of scrap that contains mercury, lead, oils, plastics, and organic materials that are charged in the EAF. The "Scrap Management Program" was reviewed and approved by 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 #P0110186]
 - (3) 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, organic materials, and other contaminants that are charged in the EAF. At a minimum, plan shall



include all requirements pursuant to 40 CFR Part 63, Subpart YYYYY, per the following sections:

63.10685(a)	Pollution prevention plan
63.10685(b)	Mercury requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 63 Subpart YYYYY]

- (4) The permittee shall maintain, at the appropriate levels established during the most recent emission test that demonstrated that the emissions unit was compliance, either:
 - a. The control system fan motor amperes and all damper positions; or
 - b. The volumetric flow rate through each separately ducted hood; or
 - c. The volumetric flow rate at the control device inlet and all damper positions.

[OAC rule 3745-77-07(A)(1) and 40 CFR Part 60, Subpart AAa]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for the electric arc furnace (EAF), emissions unit P903:
 - a. the number of heats per amount of steel production each day from the EAF, in tons;
 - b. the monthly steel production from the EAF, in tons [sum of d)(1)a. for each calendar month;
 - c. the number of days per calendar month that the EAF was operating, in days/month for each calendar month; and
 - d. the steel production per day from the EAF, in tons, based on a monthly average [d)(1)b. divided by d)(1)c. for each calendar month.

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

- (2) The permittee shall monitor the visible emissions from the baghouse(s) controlling these emissions units. Observations of the opacity of the visible emissions from these control devices shall be performed by a certified visible emission observer as follows:
 - a. The permittee shall conduct visible emission observations on each control device in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Visible emission observations shall be conducted at least once per day when the furnace is operating in the melting and refining period. These observations shall be taken in accordance with Method 9 for a least three 6-minute periods.
 - c. The opacities shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission

sites relate to only one incident of the visible emissions, only one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause or location of visible emissions observed during a single incident.

- d. The permittee shall ensure that an adequate number of personnel on site are "certified" to conduct visible emission observations in accordance with Method 9 procedures. The permittee may choose to have visible emissions observations contracted out, i.e. "certified" personnel may be provided by another company.
- e. The permittee shall maintain copies of all daily opacity observations required above. The records shall identify the persons responsible for conducting the readings and verification that their Method 9 certifications are up-to-date.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

(3) Daily observations of the opacity of the visible emissions from the meltshop shall be performed by a certified visible emission observer as follows:

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

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

(4) The permittee shall either:

- a. Check and record the control system fan motor amperes and damper position on a once-per-shift basis; or



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- b. Install, calibrate, operate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or
- c. Install, calibrate, operate, 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 (10%) 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 or 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

- (5) At a minimum, the permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

- (6) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 63, Subpart YYYYY, including the following sections:

63.10685(c) | monitoring requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart YYYYY]

- (7) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because this permit action does not involve an increase in any toxic air contaminant, as defined in OAC rule 3745-114-01, greater than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[PTI #P0110186]

- (8) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the dust collector(s) controlling this emissions unit is the relative particulate matter loadings measured by a fabric filter bag leak detection system. The appropriate indicator range(s) defining proper function the dust collector(s) are the ranges established pursuant to d)(11)d., below. When the performance indicators show operation outside its normal or usual manner of operation, the permittee shall take

corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e). below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The dust collector(s) shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

- a. The fabric filter bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.
- b. The fabric filter 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 fabric filter 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 d)(11)d. below and

the alarm must be located such that it can be heard by the appropriate plant personnel.

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

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (12) If the fabricfilter bag leak detection system alarms, the permittee shall initiate investigation of the melt shop baghouse within 1 hour of the first discovery of the alarming incident for possible corrective action. If corrective action is required, the permittee shall proceed to implement such corrective action, in accordance with a written corrective action plan, within 3 hours in order to minimize possible exceedances of the emission limitations established in Section b(1). The corrective action plan shall include, at a minimum, the following provisions:
 - a. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
 - b. Sealing off defective bags or filter media.
 - c. Replacing defective bags or filter media, or otherwise repairing the control device.
 - d. Sealing off a defective baghouse compartment.
 - e. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
 - f. Shutting down the melt shop operations, including the electric arc shaft furnace.

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

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (13) The permittee shall maintain records of all inspections and maintenance performed on the fabric filter bag leak detection system. Records shall include the date and time of



each inspection or maintenance activity; the activities performed; and the results of any drift checks and response tests.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of the 1,800 tons steel production per day from the electric arc furnace, emissions unit P903, based on a monthly average.

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the visible PE limitation from the baghouse stack;
- b. all exceedances of the visible PE limitation from the meltshop building;

[Submission of the reporting requirements of 40 CFR 60.276a for visible emissions on a quarterly basis (as opposed to semi-annually) will be appropriate and sufficient for meeting reporting requirements associated with BACT.]

- c. all periods of time (including the date) in which the permittee did not initiate investigation of the bag leak detection system within 1 hour of the first discovery of the alarming incident for possible corrective action; and
- d. all periods of time (including the date) in which the permittee did not initiate corrective actions, if needed, within 3 hours of an alarm from the bag leak detection system.

These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64, 40 CFR Part 60 Subpart AA and PTI #P0110186]

- (3) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart YYYYY, per the following sections:

63.10685(c) semi-annual compliance report

[OAC rule 3745-77-07(C)(1); 40 CFR Part 63 Subpart YYYYY]

- (4) The permittee shall submit semiannual reports that either:
 - a. identify operation of control system fan motor amperes at values exceeding +/- 15 percent (15%) of the value established during the most recent compliance test; or



- b. identify operation at volumetric flow rates through each separately ducted hood exceeding values +/- 10 percent (10%) of the value established during the most recent compliance test; or
- c. identify operation at volumetric flow rates at the control device inlet exceeding values +/- 10 percent (10%) of the value established during the most recent compliance test.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for the meltshop operations (emissions units P004, P005, P007, P012, P013, P014, P015 and P903 in accordance with the following requirements:

- a. The emission testing shall be conducted within approximately 2.5 years after the issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office. Future testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e.: Engineering Guide #16, OAC rule 3745-15-04, etc.).
- b. The emission testing shall be conducted based on term and condition b)(1)*, (the combined limitations shall be based on meltshop emissions from 2 stacks the stack of the baghouse control system serving the meltshop operations and a stack serving emissions units P013 and P014 which exhausts directly to the atmosphere, therefore, during any compliance test the permittee shall test both stacks simultaneously).
- c. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitations for PM10, PM2.5, Pb, SO2, CO, NOx, and VOC.
- d. Methods 1-4 and the following additional test methods from 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rates:

<u>Pollutant</u>	<u>Test Method</u>
NOx	Method 7
CO	Method 10
VOC	Methods 18, 25, or 25A, as appropriate
SO2	Method 6
Lead	Method 29
Mercury	Method 29

PM2.5/PM10 testing shall be performed using Method 201/201A and 202 of 40 CFR Part 51, Appendix M;

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA Northwest District Office.

- e. The test(s) shall be conducted while the emissions unit(s) is operating at or near maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Acceptable test conditions pertaining to maximum capacity are outlined in a testing guidance document titled "Explanation of Ohio EPA's "test at max" policy for requiring performance testing to be conducted while emission units operate at maximum capacity". Testing guidance documents are available on Ohio EPA's website.

For test(s) not conducted at maximum capacity as specified above, the permittee may demonstrate through recordkeeping of post-test operating rates that the operating level(s) obtained during the test(s) are representative of a maximum operating rate that the emissions unit(s) is expected not to exceed. The maximum operating rate will be considered acceptable towards demonstrating that the emissions unit(s) is able to continuously comply with applicable emission limitations.

A retest of the emissions unit(s) will be necessary if records of post-test operating rates indicate that the maximum operating rate established during the test(s) is no longer representative of the expected maximum operating capacity. Evaluations of post-test operating rates to determine if they are representative of a maximum operating rate shall be performed in accordance with the same procedures for evaluating maximum capacity as outlined above.

- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- g. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- i. For the purpose of determining the process weight rate during stack testing, the following procedures shall be followed:



- i. The maximum process weight rate for stack testing purposes is -1,800 tons steel produced per day from the EAF. Each heat shall be maximized for weight.
- ii. The process weight rate shall be determined by measuring the steel produced at the EAF per hour for each test run, prorated over a 24-hour period.

(EAF -steel produced/ton) times (24 hours/day)
- iii. The total time duration and production output for any partial EAF heats included within each baghouse test run will be incorporated into the process weight rate calculation.
- iv. The average of the meltshop totals from the three test runs will be calculated to determine the process weight rate from the stack test.
- j. For the purpose of determining compliance with the pound/ton emission limits during stack testing, the following procedures shall be followed:
 - i. The meltshop production output during the stack test will be determined by calculating the tons of steel produced in the heat(s) during each test run period.
 - ii. The total time duration and production output for any partial heats included within the test run will be incorporated into the production calculation.
 - iii. Any time periods when testing was halted for abnormal delays will be subtracted from the EAF for the production calculation.

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

- (2) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitations:

Combined emission limitations from emissions units P004, P005, P007, P012, P013, P014, P015, and P903:

- i. 2.32pounds CO/ton steel produced;
- ii. 0.13 pound VOC/ton steel produced;
- iii. 0.5pound SO₂/ton steel produced;
- iv. 0.43 pound NO_x per ton of steel produced
- v. 0.002 pound lead/ton steel produced; and
- vi. 0.00033 pound mercury/ton steel produced



Proposed Title V Permit
Nucor Steel Marion, Inc.
Permit Number: P0112447
Facility ID: 0351010017

Effective Date: To be entered upon final issuance

Applicable Compliance Method:

The pound/ton emission limitations were supplied by the company and represent weighted averages of the emissions from all of the melt shop emissions units. The limits were established based on maximum hourly operating conditions and a combination of best engineering judgment, past stack tests results from the facility, stack test results from similar operations at other facilities, and AP-42 emission factors. 100% of the total emissions from the melt shop are captured and vented to the meltshopbaghouse. The permittee shall demonstrate compliance with the emission limitations in accordance with the testing requirements specified in f)(1).

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

b. Emission Limitations:

Combined emission limitations from emissions units P004, P005, P007, P012, P013, P014, P015, and P903:

- i. 141.58 tons NO_x per rolling, 12-month period;
- ii. 164.25 tons SO₂ per rolling, 12-month period;
- iii. 761.25 tons CO per rolling, 12-month period;
- iv. 42.71 tons VOC per rolling, 12-month period;
- v. 0.657 ton lead per rolling, 12-month period; and
- vi. 0.108 ton mercury per rolling, 12-month period

Applicable Compliance Method:

The annual emission limitations were established by multiplying the pound/ton limitations by the following maximum operating conditions from the EAF: 1,800 tons/day, 365 days/year, and then dividing by 2,000 pounds/ton. Therefore, provided compliance is demonstrated with the pound/ton limitations and the maximum daily number of heats, compliance with the annual emission limitations shall be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

c. Emission Limitations:

0.0052 gr PM₁₀/dscf;
0.0049 gr PM_{2.5}/dscf

Applicable Compliance Method:

The emission limitations above were established as BACT for meltshop operations. The permittee shall demonstrate compliance with the emission limitations in accordance with the testing requirements specified in f)(1).

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

d. Emission Limitations:

115.63 tons PM10 per rolling, 12-month period;
108.96 tons PM2.5 per rolling, 12-month period

Applicable Compliance Method:

The annual emission limitations were established by multiplying the 0.0052 grain PM10/dscf and 0.0049 gr PM2.5/dscf limitations by the maximum volumetric air flow rate from the melt shop baghouse (592,288 dscfm), and by using the following conversion factors in order to convert to tons per 12-month period: 1 pound/7,000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the 0.0052 gr PM10/dscf and 0.0049 gr PM2.5/dscf limitations, compliance with the annual emission limitations shall be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

e. Emission Limitation:

Visible PE from the baghouse serving the melt shop shall not exhibit 3 percent (3%) opacity or greater, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance the monitoring and recordkeeping requirements specified in d)(2).

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

f. Emission Limitation:

Visible fugitive PE shall not exceed 0% opacity from the meltshop building.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance the monitoring and recordkeeping requirements specified in d)(3).

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

(3) During any required performance test to demonstrate compliance with the 0% opacity restriction from the meltshop, the values for the following parameters shall be determined:

- a. The control system fan motor amperes and all damper positions; or
- b. The volumetric flow rate through each separately ducted hood; or
- c. The volumetric flow rate at the control device inlet and all damper positions.



Required compliance demonstrations with the meltshop opacity limitation shall be performed in accordance with Test Methods 9, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") and the provisions specified in f)(1)d.- f)(1)i.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

g) Miscellaneous Requirements

- (1) The requirements in 40 CFR 60.273a – Emission monitoring and 40 CFR 60.274a – Monitoring of operations from 40 CFR Part 60 Subpart AAa are appropriate and sufficient for demonstrating on-going compliance with the BACT requirements established in accordance with OAC rules 3745-31-10 through 3745-31-20.

[OAC rule 3745-77-07(C)(1) and PTI #P0110186]

- (2) The permittee may petition the Administrator to approve any alternative to either the monitoring requirements specified in paragraph d)(4) or the monthly operational status inspections specified in paragraph d)(5) if the alternative will provide a continuous record of operation of each emission capture system.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

- (3) The permittee shall submit a revised CAM Plan no later than 180 days after the issuance date of the Title V operating permit. The CAM plan shall be updated to include the appropriate indicator range(s) defining proper function the dust collector(s), as established pursuant to d)(11)d., above.

[OAC rule 3745-77-07(C)(1) and 40 CFR 64.6(e)(2)]