



Environmental  
Protection Agency

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

1/19/2011

Certified Mail

Mr. Kim Myers  
Amsted Rail - Columbus Plant  
3900 Bixby Road  
Groveport, OH 43125

Facility ID: 0125100987  
Permit Number: P0103976  
County: Franklin

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Central District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Ohio EPA DAPC, Central District Office





**FINAL**

**Division of Air Pollution Control  
Title V Permit  
for  
Amsted Rail - Columbus Plant**

|                |            |
|----------------|------------|
| Facility ID:   | 0125100987 |
| Permit Number: | P0103976   |
| Permit Type:   | Renewal    |
| Issued:        | 1/19/2011  |
| Effective:     | 2/9/2011   |
| Expiration:    | 2/9/2016   |





Division of Air Pollution Control
Title V Permit
for
Amsted Rail - Columbus Plant

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## Authorization

Facility ID: 0125100987  
Facility Description: Steel Foundries  
Application Number(s): A0035983  
Permit Number: P0103976  
Permit Description: Steel Foundry  
Permit Type: Renewal  
Issue Date: 1/19/2011  
Effective Date: 2/9/2011  
Expiration Date: 2/9/2016  
Superseded Permit Number: P0083430

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

Amsted Rail - Columbus Plant  
3900 Bixby Road  
Groveport, OH 43125

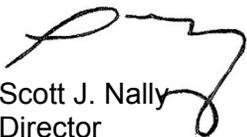
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

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, Central 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 (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director

## **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
  - (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

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

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

- (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 promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter. In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation. These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires

reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule. If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in 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."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Central District Office.

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

### 3. 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) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition 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 appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (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 appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

- (2) Compliance certifications shall include the following:
- a. An identification of each term or condition of this permit that is the basis of the certification.
  - b. The permittee's current compliance status.
  - c. Whether compliance was continuous or intermittent.
  - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (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 appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

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

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

**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 opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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

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

#### **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**

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

**28. Permit Transfers**

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

*(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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter. The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in 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 potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

## **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. For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a) The electric arc furnaces, emission units P901 and P902, are subject to provisions in 40CFR Part 63, Subpart ZZZZZ, and Amsted Rail provided written notification of area source designation prior to January 2, 2009. The complete area source Maximum Achievable Control Technologies (MACT) requirements (also known as Generally Available Control Technologies (GACTs)), including the area source MACT General provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

b) Visible fugitive particulate emissions, as established in 40 CFR subpart ZZZZZ (63.10895(e)), shall not exceed 20 percent opacity, as a 6-minute average, except for one 6-minute average that does not exceed 30% opacity in any 1 hour observation period for an area sources under the foundry area source MACT.

c) Facility HAP emission limitations

The permittee has elected to comply with federally enforceable restrictions on phenolic resin usages to limit facility-wide single hazardous air pollutant (HAP) emissions (phenol) to less than 8.5 tons VOC/yr in Permit to Install (PTI) 01-08346 for emissions unit P001, and total facility-wide combined HAP emissions (including HAP metals emissions) to less than 25 tons/yr through emission calculations and compliance demonstration requirements specified in 2.d) below of this Title V permit. In addition the permittee has agreed to limit any other single HAP to less than 10 tons/yr.

The facility will not be subject to the Maximum Achievable Control Technology (MACT) standard for Iron and Steel Foundries (40 CFR 63 Subpart EEEEE, as proposed in 67 FR 78274 on December 3, 2002) provided the permittee complies with the OC (phenol) limitation specified in the terms and conditions for emissions unit P001 of this permit and maintains total facility-wide combined HAP emissions to less than 25 tons/yr using the methodology specified in 2.d)(4) below.

In addition, the permittee is required to comply with pollution prevention management practices for metallic scrap and mercury switches per 40 CFR 63.10890(a) that minimizes the use of scrap that contains mercury, lead, oils, plastics, and organic materials that are charged in the EAFs (electric arc furnaces (P901 and P902), thereby further minimizing HAP emissions.

d) Facility-wide single HAP potential to emit

Phenol is emitted from emissions units P001 and P020. The federally enforceable restrictions on phenolic resin usages are specified in the terms and conditions for emissions unit P001 of this permit.

P001 specifies an emission limitation of 8.5 tons organic compounds (OC) per rolling, 12-month period. All OC from P001 is assumed to be phenol. P020 specifies an emission limitation of 1.49 tons OC/yr (1.48 tons/yr phenol and 0.01 ton/yr formaldehyde) which is based upon the potential to emit for P020.

Therefore, maximum facility-wide phenol (single HAP) emissions are limited to  $(8.5 + 1.48) = 9.98$  tons/y and any other single HAP would be limited to 9.99 tons/yr.

P021 (Pressure Pouring Station) uses graphite molds that do not emit phenol or formaldehyde; however, for purposes of the facility-wide HAP potential to emit analyses in 2.e)(1) below, only a fraction of OC emissions from P021 are organic HAP emissions. Section D of the Background section of 40 CFR 63 Subpart EEEEE indicates that organic HAP emissions from electric arc furnaces are negligible. Therefore the OC emissions from the electric arc furnaces (P901 and P902) should not be included as organic HAP emitters in a HAP analysis.

e) Facility-wide combined HAP potential to emit

(1) Organic HAP emission limitations:

As determined in 2.c), the facility-wide organic HAP emissions may be estimated as:

$$8.5 \text{ (P001)} + 1.49 \text{ (P020)} + 0.81 * \text{ (P021)} = 10.8 \text{ tons OC/yr.}$$

\* Emission factors from USEPA FIRE database and American Foundry Society emission factor for HAPs used to estimate HAP emissions from P021:

SCC 3-04-007-08 - 0.14 lb VOC/ton of metal processed in Pouring/Casting

SCC 3-04-007-09 - 1.20 lbsVOC/ton of metal processed in Casting Shakeout

Total = 1.34 lbs VOC/ton of metal processed

Lightly cored molds 0.416 lb organic HAP/ton metal poured, cooled and shaken

Ratio of HAPs to VOCs =  $0.416 \text{ lb HAP} / 1.34 \text{ lbs VOC} = 0.31 \text{ HAP/VOC}$

$2.6 \text{ ton OC/yr} \times 0.31 \text{ HAP/VOC} = 0.81 \text{ ton HAP/yr}$  from pressure pouring station (P021)

(2) Restricted lead (Pb) emission limitation for P901 and P902.

The terms and conditions for the EAFs (P901 and P902) each contain federally enforceable lead (Pb) emission limitations for PTI 01-12147 of 0.089 ton/yr stack Pb emissions and 0.124 tons/yr fugitive Pb emissions.

Therefore potential emissions from the combined P901 and P902 are 0.213 TPY Pb.

(3) Single and combined metal HAPs potential to emit:

The permittee has provided stack testing data for HAP metals conducted for the EAF at the Amsted Rail (formerly the Griffin Wheel) facility in Groveport, Ohio. The permittee

also analyzed baghouse dust samples taken during the stack testing, and the analysis of these samples has been used to estimate fugitive emissions of HAP metals.

- a. The following percentages of HAP metal emissions to total particulate emissions were established based on the stack testing: antimony (0.00054 #/ton), arsenic (0.00197 #/ton), beryllium (0.00034 #/ton), cadmium (0.00034 #/ton), chromium (0.00016 #/ton), cobalt (0.000598 #/ton), manganese (0.000365 #/ton), mercury (0.000057#/ton), nickel (0.00405 #/ton), and selenium (0.000883 #/ton). These lbs. per ton were multiplied by 256,500 tons/yr (federally enforceable limitation on annual production rate) and divided by 2000 lbs/ton to establish TPY values for each HAP metal.

The TPY HAP metal stack emissions (except lead) were summed to arrive at a value of 1.8 TPY HAP metals for the combined stack for P901 and P902.

- b. The following percentages of HAP metals are based on the analysis of baghouse dust samples taken during the stack testing: antimony (0.00149%), arsenic (0.0029%), beryllium (0.000007%), cadmium (0.0092%), chromium (0.0499%), cobalt (0.0037%), manganese (5.21%), mercury (0.000019%), nickel (0.003%), and selenium (0.000005%). These percentages were divided by 100 and then multiplied by the federally enforceable fugitive PM-10 emission limitations from PTI 01-12147 for P901 and P902 (12.7 lbs PM-10/hr which is equivalent to 58.0 tons/yr at 8760 hrs/yr), divided by 35.1 tons/hr. (operating rate during stack testing) then multiplied by 256,500 tons/yr (federally enforceable limitation on annual production rate) and divided by 2000 lbs/ton to establish TPY values for each HAP metal. The TPY HAP metal fugitive emissions (except lead) were summed to arrive at values of 2.5 TPY HAP metals for the combined sources of P901 and P902.

The total facility-wide HAP potential to emit may be calculated as the sum of e)(1), e)(2), e)(1)a. and e)(1)b. as follows:  $(10.88 + 0.21 + 1.8 + 2.5) = 15.39$  TPY.

Notwithstanding, total facility-wide HAP potential to emit shall not exceed 24.99 tons/yr.

- f) Pursuant to 40 CFR Part 64, the permittee has submitted a compliance assurance monitoring plan for particulate emissions from emissions units P004, P005, P006, P012, P013, P015, P016, P017, P018, P019 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

[Authority for term: 40 CFR Part 64]

3. The following insignificant emissions units are located at this facility are exempt from permit requirements, because they are not subject to any applicable requirements or because they meet the "deminimis" criteria established in OAC rule 3745-15-05:

B002 – tempering draw furnace; and

P025—wheel apex grinding;

4. The following insignificant emission units at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emission unit. The insignificant emission 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 and 3745-21.

B011 – make up air heater #1;

B013 – make up air heater #2;

B015 – make up air heater #3;

B017 – make up air heater #4;

B019 – make up air heater #5;

B021– make up air heater #6;

F002 – raw sand system, unloading, storage, transfer, and sand silo (PTI 01-333);

P024–gas- fired pre-heater for pressure pouring tube;

P026—hand grinding of wheel; and

P027—final hand grinding of wheels.

## **C. Emissions Unit Terms and Conditions**



1. B001, Normalizing Furnace

Operations, Property and/or Equipment Description:

Natural gas/propane fired normalizing furnace (46 MMBTU/hr)

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 operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-31-05(A)(3), OAC rule 3745-18-06(E)(2), OAC rule 3745-17-07(A)(1), and OAC rule 3745-17-11(B)(1).

(2) Additional Terms and Conditions

a. There were no emission limitations established in PTI 01-333 pursuant to OAC rule 3745-31-05(A)(3).

b. This emissions unit is exempt from the visible particulate emissions (PE) limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c. 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. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas is the only source of PE from this emissions unit.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or propane in this emissions unit.



d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or propane was burned in this emissions unit. Each report shall be submitted within thirty (30) days after the deviation occurs.

f) Testing Requirements

- (1) None.

g) Miscellaneous Requirements

- (1) None.



2. F001, Lime Storage

Operations, Property and/or Equipment Description:

Pneumatic loading and transfer of lime storage silo vented to bin vent

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 operations(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. 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 rule 3745-31-05(A)(3) (PTI 01-333) | Particulate emissions (PE) from the storage silo bin vent shall not exceed 0.8 lb PE/hr.<br><br>See b)(2)a below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |
| b. | OAC rule 3745-17-07(A)(1)              | Visible PE from the bin vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.   |
| C, | OAC rule 3745-17-11(B)                 | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |

(2) Additional Terms and Conditions

- a. The permittee shall vent all PE generated during pneumatic loading of this emissions unit to a bin vent fabric filter that achieves a minimum of 99% control efficiency for particulate emissions.
- b. The 0.8 lb PE/hr limitation for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop additional record keeping and/or reporting requirements to ensure compliance with this limit.

## c) Operational Restrictions

- (1) None.

## d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the bin vent stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

## e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the bin vent stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office, by January 31 and July 31 of each year and shall cover the previous 6-month period.

## f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:  
Visible PE from the bin vent shall not exceed 20% opacity, as a 6-minute average.
- Applicable Compliance Method:
- If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

PE from the storage silo bin vent shall not exceed 0.8 lb PE/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated by multiplying 20 tons lime dust/hr (maximum pneumatic lime load in rate) by 4 lbs PE/ton (SCC 3-05-016-10 lime storage pile) and by (1-0.99) (control efficiency across bin vent filter).

If required, compliance shall be demonstrated through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

g) Miscellaneous Requirements

(1) None.



**3. F005, Roadways**

**Operations, Property and/or Equipment Description:**

Automobile and truck traffic on paved and unpaved roadways and parking lots

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 operations(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. 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. | Paved roadways and parking areas<br>OAC rule 3745-31-05(A)(3)<br>(PTI 01-08242) | Particulate emissions (PE) from paved roadways and parking areas shall not exceed 12.4 tons/yr.<br><br>See b)(2)a below.<br><br>There shall be no visible PE except for a period of 1 minute during any 60-minute observation period from a paved roadway or parking area.<br><br>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust<br><br>See b)(2)c and b)(2)e - b)(2)i below. |
| b. | unpaved roadway and loading area<br>OAC rule 3745-31-05(A)(3)<br>(PTI 01-08242) | PE from the unpaved roadway shall not exceed 0.1 ton/yr.<br><br>See b)(2)b below<br><br>There shall be no visible PE except for a period of 3 minutes during any 60-minute observation period from an unpaved roadway or loading area.<br><br>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust  |

|    | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
|    |                               | See b)(2)d - b)(2)j below.                        |
| c. | OAC rule 3745-17-07(B)(4)     | None, see b)(2)k below.                           |
| d. | OAC rule 3745-17-07(B)(5)     | None, see b)(2)k below.                           |
| e. | OAC rule 3745-17-08(B)        | None, see b)(2)l below.                           |

(2) Additional Terms and Conditions

- a. The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:
- paved roadways:
- entrance roadway
  - scrap, limestone and oxygen delivery roadway
  - wheel shipment roadway
  - EAF baghouse access roadway
  - EAF slag removal staging area
- paved parking area:
- employee parking lot
- b. The unpaved roadway (slag haul road to landfill) and loading area covered by this permit are subject to the above-mentioned requirements.
- c. The permittee shall employ best available control measures on all paved 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 paved roadways and parking areas by sweeping at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.
- d. The permittee shall employ best available control measures on the unpaved roadway 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 by application of water to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.
- e. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a

paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- 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 with the control measures specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
  - g. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
  - 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. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
  - j. The use of used oil as a dust suppressant is prohibited per OAC rule 3745-279-82.
  - k. This emissions unit is exempt from the visible fugitive PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(d) because the emissions unit is not subject to the requirements of OAC rule 3745-17-08(B).
  - l. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 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 of the roadways and parking areas in accordance with the following frequencies:

| <u>Roadways and/or parking area</u>        | <u>Inspection frequency</u> |
|--|-----------------------------|
| Paved entrance roadway                     | weekly                      |
| Paved scrap, limestone and oxygen delivery | weekly                      |
| Paved wheel shipment roadway               | weekly                      |
| Paved EAF baghouse access roadway          | weekly                      |
| Paved EAF slag removal area                | daily, when in use          |
| Paved employee parking lot                 | weekly                      |
| Unpaved landfill slag haul road            | daily, when in use          |

- (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.
- (3) The permittee shall maintain records of the following information:
- the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - the dates the control measures were implemented; and
  - on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in (3)d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadway, and shall be updated on a calendar quarter basis.

e) Reporting Requirements

- Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- The permittee shall submit semiannual written reports that identify:

- a. each day during which an inspection was not performed by the required frequency; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

- a. Emission Limitation:

PE from paved roadways and parking areas shall not exceed 12.4 tons/yr.

Applicable Compliance Method:

Compliance with the annual limitation may be demonstrated by calculating an AP-42 fugitive PE factor for paved surfaces by multiplying 0.082 lb/VMT (PM30 particle size multiplier) multiplied by 9.72 gr/sq ft (Griffin Wheel) divided by 2 multiplied by vehicle weight divided by 3 multiplied 1.5 for each vehicle weight by the corresponding miles travelled (VMT) per day that is summed and multiplied by 365 days per year:

Emission factor paved roadways - AP-42 section 13.2.1

$$EF = k(sL/2)^{0.65} (W/3)^{1.5} \text{ lbs/VMT}$$

k = particle size multiplier = 0.082 lb/VMT (PM-30 Table 13.2.1-1)

k = particle size multiplier = 0.016 lb/VMT (PM-10 Table 13.2.1-1)

sL = silt loading on road surface = 9.7 gr/ft<sup>2</sup> (Griffin Wheel)

W = vehicle weight (tons) = 1.5 (employee car)

$$0.082(9.7/2)^{0.65} (1.5/3)^{1.5} * 56.6 \text{ m/car d} = 4.6 \text{ lbs/day}$$

W = vehicle weight (tons) = 23.6 (sand delivery truck)

$$0.082(9.7/2)^{0.65} (23.6/3)^{1.5} * 0.06 \text{ m/sand truck d} = 0.3 \text{ lb/day}$$

W = vehicle weight (tons) = 28 (lime delivery truck)

$$0.082(9.7/2)^{0.65} (28/3)^{1.5} * 0.3 \text{ m/lime truck d} = 1.8 \text{ lbs/day}$$

W = vehicle weight (tons) = 8.3 (misc delivery truck)

$$0.082(9.7/2)^{0.65} (8.3/3)^{1.5} * 0.4 \text{ m/ delivery truck d} = 0.44 \text{ lb/day}$$

W = vehicle weight (tons) = 29.3 (scrap delivery)

$$0.082(9.7/2)^{0.65} (29.3/3)^{1.5} * 2.5 \text{ m/scrap delivery d} = 17.5 \text{ lbs/day}$$

W = vehicle weight (tons) = 29.3 (finished wheel shipment)

$$0.082(9.7/2)^{0.65} (29.3/3)^{1.5} * 5.8 \text{ m/wheel shipment d} = 40.2 \text{ lbs/day}$$

W = vehicle weight (tons) = 25.7 (EAF dust truck)

$$0.082(9.7/2)^{0.65} (25.7/3)^{1.5} * 0.16 \text{ EAF m/dust truckd} = 0.92 \text{ lb/day}$$

W = vehicle weight (tons) = 18.4 (EAF slag truck)

$$0.082(9.7/2)^{0.65} (18.4/3)^{1.5} * 2.2 \text{ m/slag truck d} = 2.2 \text{ lbs/day}$$

$$67.9 \text{ lbs PE/day} * 365 \text{ days/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 12.4 \text{ tons PE/yr}$$

Annual fugitive PE from paved roadways equals 12.4 tons/yr

b. Emission Limitation:

PE from unpaved roadways shall not exceed 0.1 ton/yr.

Applicable Compliance Method:

Compliance with the annual limitation for unpaved roadways may be demonstrated by multiplying the vehicle travel miles per year times a calculated AP-42 emission factor and a control efficiency for dust suppression.

Unpaved roadways: AP-42 emission factor section 13.2.2 (November 2006)

Equation 1a (vehicles traveling on unpaved surfaces at industrial sites)

$$E = k(s/12)^a(W/3)^b$$

k = base emission factor for particle size range = 4.9 lb/VMT (for PM-30 which is assumed to be equivalent to total suspended particulate matter)

s = surface material silt content = 12% (supplied by permittee)

a = 0.7

W = average vehicle weight (tons) = 18.4 (EAF slag truck)

b = 0.45

$$E = 4.9 * (12\%/12)^{0.7} * (18.4/3)^{0.45}$$

$$E = 0.441 \text{ lb/VMT}$$

0.4 miles/EAF slag truck day \* 365 days/yr = 146 miles/yr

PE = 0.441 lb/VMT \* 146 mi/yr \* 1 ton/2000 lb

PE = 0.03 ton/yr

Using a 50% control efficiency for watering of roadways

PE = 0.03 ton/yr \* (1-.50)

PE = 0.02 ton/yr

c. Emission limitation:

There shall be no visible PE except for a period not to exceed 1 minute during any 60-minute observation period from paved roadways and parking areas.

Applicable Compliance Method:

If required, compliance with the VE limitation for the paved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

d. Emission limitation:

There shall be no visible PE except for a period not to exceed 3 minutes during any 60-minute observation period from unpaved roadways.

Applicable Compliance Method:

If required, compliance with the VE limitation for the unpaved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.



**4. F006, Slag Handling**

**Operations, Property and/or Equipment Description:**

Slag handling with storage piles, screening, metals recovery and landfilling.

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08357) | Fugitive particulate emissions (PE) from slag landfilling and metal reclaim operations shall not exceed 3.46 lbs/hr and 8.0 tons/yr.<br><br>See b)(2)a below.<br><br>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.<br><br>See b)(2)b through b)(2)d below.<br><br>For the slag storage piles, there shall be no visible PE except for a period of time not to exceed 6 minutes during any 60-minute observation period.<br><br>Visible PE of fugitive dust from screening, conveying and loading of slag shall not exceed 20% opacity, as a 3-minute average, except as provided by rule. |
| b. | OAC rule 3745-17-08(B)                      | None, see b)(2)e below.  |
| c. | OAC rule 3745-17-07(B)                      | None, see b)(2)f below.  |

(2) Additional Terms and Conditions

a. The operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

- i. slag screening and metals recovery
  - ii. slag storage piles, and
  - iii. landfilling operations.
- b. The permittee shall employ best available control measures for the above-identified material handling operations 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 perform the following control measures to ensure compliance:

| <u>material handling operation</u> | <u>control measures</u>              |
|------------------------------------|--------------------------------------|
| slag screening and metals recovery | water spray on screen                |
| slag storage piles                 | watering, as needed                  |
| landfilling operations             | watering and/or minimize drop height |

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

- c. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspections conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure shall continue during the operation of the material handling operations until further observation confirms that use of the control measure is unnecessary.
  - d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
  - e. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
  - f. This emissions unit is exempt from the visible fugitive PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(d) because the emissions unit is not subject to the requirements of OAC rule 3745-17-08(B).
- c) Operational Restrictions
- (1) Water sprays shall be operated on the slag screening and metals recovery operations to ensure compliance with the visible emission limitations specified above for loading, screening and subsequent conveying operations.

## d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| <u>material handling operation</u> | <u>minimum inspection frequency</u> |
|------------------------------------|-------------------------------------|
| slag screening and conveying       | daily, while in operation           |
| slag storage piles                 | daily, while in operation           |
| landfilling operations             | daily, while in operation           |

- (2) The above-mentioned inspections shall be performed during representative operating conditions.

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

- a. the date and reason any required inspection was not performed;
- 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.

The information in (3)d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

## e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- (2) The permittee shall submit semiannual written reports that identify:

- a. each day during which an inspection was not performed by the required frequency; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(A)(3)(c)]

## f) Testing Requirements

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

a. Emission Limitation:

PE of fugitive dust from slag landfilling and metal reclaim operations shall not exceed 3.46 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by summing the calculated emission rate using emission factors from AP-42, Table 11.19.2-2 multiplied by 100 tons/hr (maximum weight slag reclaim).

Sum up the different operations resulting in: 100 multiplied by 0.0021 lb PM10/ton (SCC 3-05-020-21 fines screening) plus 100 tons/hr multiplied by 0.0014 lb PM10/ton (SCC 3-05-020-06 transfer point) multiplied by (1- 0.7) (spray bar control) plus 30 tons/hr (maximum metal weight) multiplied by 0.0001 lb PM10/ton (SCC 3-05-020-32 reclaimed steel load-in) equals 0.803 lb/hr from slag reclaim operation.

Additional PE calculated for unloading reclaimed steel (30 tons/hr) and landfilling screened slag (100 tons/hr) equal 0.85 lb/hr equals 1.65 lbs PE/hr.

SCC 3-05-020-21 - 0.0021 lb PM10/ton \* 100 tons/hr = 0.21 lb/hr

SCC 3-05-020-06 - 0.0014 lb PM10/ton \* 100 ton/hr \* 0.7 \* 6 = 0.59 lb/hr

SCC 3-05-020-32 - 0.0001 lb PM10/ton \* 30 ton/hr = 0.003 lb PM10/hr

Batch Drop Feed Table 12.5-4 - 0.013 lb PM10/ton \* 100 ton/hr \* 0.5 = 0.65 lb PM10/hr

Batch Drop Steel Table 12.5-4 - 0.013 lb PM10/ton \* 30 ton/hr \* 0.5 = 0.195 lb PM10/hr

1.65 lb PM10/hr \* 2.1 (convert PM10 to PE, per AP-42 method) = 3.46 lbs PE /hr

b. Emission Limitation:

PE of fugitive dust shall not exceed 8.0 tons/yr from the slag landfilling and metal reclaim operations.

Applicable Compliance Method:

Compliance with the annual emission limitation may be demonstrated by summing the product of 3.46 lbs PE/hr (metal reclaim) multiplied by 40 hrs/wk multiplied by 52 wks/yr divided by 2,000 lbs/ton equals 3.59 tons PE/yr plus the product of 192,000 tons (slag landfilled per year) multiplied by 0.0132 lb PE/ton (AP42 landfilling emission factor) equals 1.26 tons/yr plus the product of 5 acres

landfill area multiplied by 3.5 lbs/acre/day (AP-42 wind erosion) multiplied by 365 days/yr divided by 2,000 lbs/ton equals 3.19 ton PE/yr resulting in a total annual emission of 8.0 tons PE/yr.

c. Emission Limitation:

Visible PE of fugitive dust from screening, conveying and loading of slag shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with U.S. EPA Method 9, with the following modifications:

the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible emission observations recorded at 15-second intervals;

opacity observations shall be made from a position that provides the observer a clear view of the emissions unit and the fugitive dust, with the sun behind the observer;

where possible, visible opacity observations shall be conducted at a position of at least fifteen feet from the source of emissions and the line of sight should be approximately perpendicular to the flow of fugitive dust and to the longer axis of the emissions; and

the visible opacity observations shall be made for the point of highest opacity within the fugitive dust emitted from the source.

[OAC rule 3745-17-03(B)(3)]

d. Emission Limitation:

For the slag storage piles, there shall be no visible PE except for a period of time not to exceed 6 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material storage piles identified in this permit shall be determined in accordance with U.S. EPA Method 22, with the following modifications:

if the observer's view is obscured and observations must be terminated prior to completing the necessary or desired observation period, the observer shall note this fact on the observation form; and the observation period shall be completed when the view of the storage pile is no longer obscured;

the observer shall identify all interruptions due to rest breaks on the observation form; and

observations, excluding break periods and periods of obscure vision, shall be considered continuous for the purpose of determining compliance with the visible emission limitation.

[OAC rule 3745-17-03(B)(4)] and [OAC rule 3745-17-07(B)(6)]

g) Miscellaneous Requirements

- (1) None.



**5. F007, Scrap Bin**

**Operations, Property and/or Equipment Description:**

Scrap bin with charge handling in melt shop (42 tons/hr)

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08367) | Particulate emissions (PE) from the melt shop roof monitor shall not exceed 4.58 lbs/hr and 20.1 tons/yr.<br><br>PM10 emissions from the melt shop roof monitor shall not exceed 2.97 lbs/hr and 13.0 tons/yr.<br><br>Best available technology measures that are sufficient to minimize or eliminate visible emissions of fugitive dust<br><br>Visible fugitive particulate emissions of fugitive dust from the roof monitor shall not exceed 20% opacity, as a six-minute average, during any sixty minute observation period.<br><br>See b)(2)a. |
| b. | OAC rule 3745-17-11(B)(1)                   | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| c. | OAC rule 3745-17-08(B)                      | None, see b)(2)b below.   |
| d. | OAC rule 3745-17-07(B)(3)                   | None, see b)(2)c below.   |

(2) Additional Terms and Conditions

- a. The permittee shall employ best available technology (BAT) measures for the following material handling operation 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 perform the following control measure(s) to ensure compliance:

| <u>material handling operation</u> | <u>control measure</u> |
|------------------------------------|------------------------|
| scrap and charge handling          | building enclosure     |

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

- b. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- c. This emissions unit is exempt from the the requirements specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(d) because the emissions unit is not subject to the requirements of OAC rule 3745-17-08(B).
- d. The 4.58 lbs PE/hr limitation for this emissions unit was established in PTI 01-08367 to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop additional record keeping and/or reporting requirements to ensure compliance with this limit.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the roof monitor serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the visible emission check until the incident has ended. The observer may indicate that the visible emission 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.

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
  - (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the roof shop monitor serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

PE from the melt shop roof monitor shall not exceed 4.58 lbs PE/hr.

Applicable Compliance Method:

The hourly PE rate limitation was determined by multiplying 42.4 tons/hr (maximum charge rate) by 0.36 lb PM10/ton (SCC 3-04-007-12 charge handling) and by (1-0.70) (representing an assumed 70% RACM enclosure control efficiency).
    - b. Emission Limitation:

PE from the melt shop roof monitor shall not exceed 2.97 lbs PM10/hr.

Applicable Compliance Method:

The hourly PM10 emission rate was determined by multiplying 42.4 tons/hr (maximum charge rate) by 0.07 lb PM10/ton (steel handling non-melting foundry operations Table III-1, Battelle Laboratories, 8/15/75).

c. Emission Limitation:

Visible fugitive particulate emissions of fugitive dust from the roof monitor shall not exceed 20% opacity, as a six-minute average, during any sixty minute observation period.

Applicable Compliance Method:

If required, compliance shall be demonstrated through VE observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

d. Emission Limitation:

PE from the melt shop roof monitors shall not exceed 20.1 tons/yr.

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

e. Emission Limitation:

PM10 from the melt shop roof monitors shall not exceed 13.0 tons PM10/yr.

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

g) Miscellaneous Requirements

- (1) None.



6. P001, Coated Sand System

Operations, Property and/or Equipment Description:

Coated sand system with 2.25 MMBTU/hr gas fired heater w/sand and resin mixer vented to baghouse 13.

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08346) | <p>Particulate emissions (PE) in the stack gases from the baghouse shall not exceed 0.77 pound per hour and 3.4 tons per year.</p> <p>PM10 emissions in the stack gases from the baghouse shall not exceed 0.46 pound per hour and 2.0 tons per year.</p> <p>Nitrogen oxides (NOx) emissions in the stack gases from the baghouse shall not exceed 0.20 pound per hour and 0.88 ton per year.</p> <p>Carbon monoxide (CO) emissions in the stack gases from the baghouse shall not exceed 0.04 pound per hour and 0.18 ton per year.</p> <p>See b)(2)a and b)(2)b below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-08(B) and 3745-31-05(D).</p> |
| b. | OAC rule 3745-17-11(B)(1)                   | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |

|    | Applicable Rules/Requirements            | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
| c. | OAC rule 3745-17-07(A)                   | Visible PE in the stack gases from the baghouse shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  |
| d. | OAC rule 3745-31-05(D)<br>(PTI 01-08346) | OC emissions in the stack gases from the sand and resin mixer shall not exceed 15.86 pounds per hour and 8.5 tons per rolling, 12-month period. (All the OC emissions are assumed to be phenol emissions.)<br><br>See section b)(2)a and c)1 below. |
| e. | OAC rule 3745-17-08(B)                   | See b)(2)c below.   |
| f. | OAC rule 3745-17-07(B)                   | See b)(2)d below.   |
| g. | OAC rule 3745-21-08(B)                   | See b)(2)e below.   |

(2) Additional Terms and Conditions

- a. The short term limitations of 0.77 lb PE/hr, 0.46 lb PM10/hr, 0.20 lb NOx/hr, 0.04 lb CO/hr and 15.86 lbs OC/hr were established in PTI 01-08346 to reflect the potential to emit for the coated sand system. Therefore, it is not necessary to develop additional monitoring, record keeping and reporting requirements to ensure compliance with these limits.
- b. The permittee shall operate and vent all PE from the sand heater and distribution cyclone to the baghouse whenever this emissions unit is in operation.
- c. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- d. This emissions unit is exempt from the visible fugitive PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(d) because the emissions unit is not subject to the requirements of OAC rule 3745-17-08(B).
- e. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08346.

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

## c) Operational Restrictions

- (1) The maximum resin flake usage in the sand and resin mixer shall not exceed either 212.5 tons at 8% phenol content, by weight, or 242.5 tons at a 7% phenol content, by weight, during any rolling, 12-month period.
- (2) The pressure drop across the baghouse in the coated sand system shall be maintained within the manufacturer's recommended range of no less than 1 and no greater than 8 inches of water column, while the emissions unit is in operation.

## d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information in the sand and resin mixer, during each monthly period, for the purpose of determining compliance with the rolling, 12-month OC (phenol) emission limitation:
  - a. the cumulative resin flake usage, in tons, for each phenol content (8% and 7%);
  - b. the rolling, 12-month resin flake usages for each phenol content; and
  - c. the rolling, 12-month OC (phenol) emission rate, calculated by multiplying the rolling 12-month resin usage, in tons, for each phenol content resin flake by the corresponding phenol weight fraction and by an assumed 50% (0.5) volatilization rate\* and then summing the results for all the resin flakes.

\* The volatilization rate shall be adjusted based upon the results of the most recent emission testing.
- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse in the coated sand system while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record:
  - a. pressure drop across the baghouse for each day of operation; and
  - b. a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.
- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.
- (4) The PTI application for this emissions unit P001, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Phenol

TLV (mg/m<sup>3</sup>): 19

Maximum Hourly Emission Rate (lbs/hr): 15.86

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 278

MAGLC (ug/m<sup>3</sup>): 452

The permittee, has demonstrated that emissions of phenol, from emissions unit(s) P001 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each exceedance of the annual phenolic resin usage limitations in c)(1).
  - b. each exceedance of the emission limitation of 8.5 tons of OC per rolling, 12-month period;
  - c. each day, during which the pressure drop across the baghouse did not comply with the allowable range specified in c)(1), above;

- d. each day during which an inspection was not performed by the required frequency specified in d)(1) and d)(2), excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
- e. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

[OAC rule 77-07(A)(3)(c)] and [OAC rule 3745-17-07]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3)]

f) Testing Requirements

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

- a. Emission Limitation:

PE in the stack gases from the baghouse shall not exceed 0.77 lb/hr and 3.4 tons/yr.

- a. Applicable Compliance Method:

The permittee conducted USEPA Methods 5 and 9 testing on stack emissions from dust collector #13 on March 4 & 5, 2009, and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on April 8, 2009.

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

- i. The emission testing shall be conducted within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable mass particulate emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.

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

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8,760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

b. Emission Limitation:

PM10 emissions in the stack gases from the baghouse shall not exceed 0.46 lb/hr and 2.0 tons/yr.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated by multiplying 8.6 tons sand/hr (maximum process weight) multiplied by 0.54 lb PM10/ton sand (SCC code 3-04-007-06 sand handling steel foundry) and by 0.1 (assumed 90% baghouse control efficiency).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 201 or 201a.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8,760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

c. Emission Limitation:

Visible PE in the stack gases from the baghouse shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

d. Emission Limitation:

NOx emissions in the stack gases from the baghouse shall not exceed 0.20 lb/hr and 0.88 tons/yr.

Applicable Compliance Method:

Compliance with the hourly allowable emission limitation may be demonstrated by multiplying 100 lbs NOx/MMcf gas (SCC 3-90-006-89 natural gas heat) by

0.002 MMcf/hr (maximum hourly rating). If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8,760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

e. Emission Limitation:

CO emissions in the stack gases from the baghouse shall not exceed 0.04 lb/hr and 0.18 ton/yr.

Applicable Compliance Method:

Compliance with the hourly allowable emission limitation may be demonstrated by multiplying 20 lbs CO/MMcf gas (SCC 3-90-006-89 emission factor natural gas heat) by 0.002 MMcf/hr (maximum gas rating).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8,760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

f. Emission Limitation:

OC emissions in the stack gases shall not exceed 15.86 lbs/hr and 8.5 tons per rolling, 12-month period.

Applicable Compliance Method:

The permittee had conducted USEPA CTM 32 testing on stack emissions from the coated sand system on December 15, 2004, and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on February 14, 2005.

Compliance with the hourly emission limitation may be demonstrated by multiplying 363 pounds resin/hour (maximum process weight rate) by 0.08 (resin 1115G phenol content % by weight) and by 0.5 (assumed volatilization rate - 11/3/95 Borden letter).



If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 32 for phenol emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The rolling, 12-month limitation shall be based on the record keeping in d)(1).

g) **Miscellaneous Requirements**

- (1) None.

**7. P019, East King Mill**

**Operations, Property and/or Equipment Description:**

mold machining mill (King Mill) vented to baghouse 14

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-1742)             | Particulate emissions (PE) from the baghouse stack shall not exceed 1.0 lb/hr and 4.3 tons/yr.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).<br><br>See b)(2)a. below. |
| b. | OAC rule 3745-17-07(A)                                 | Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  |
| c. | OAC rule 3745-17-11(B)(1)                              | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |
| d. | 40 CFR Part 64 – Compliance Assurance Monitoring (CAM) | See d)(1) through d)(4), e)(1) and e)(2).  |

(2) Additional Terms and Conditions

a. The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of no less than 3 and not greater than 11 inches of water column, while the emissions unit is in operation.

## d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual. The permittee shall record:
- pressure drop across the baghouse for each day of operation; and
  - a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.

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

- (2) The permittee shall perform monthly\* checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each baghouse stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the visible emissions;
  - the total duration of any visible emission incident; and
  - any corrective actions taken to eliminate the visible emissions.

The visible emissions check is not required to be performed by individuals certified to conduct U.S. EPA Reference Method 9 observations.

\*This emissions unit operates infrequently (approximately 500 hours per year); therefore, a monthly visible emissions check is deemed to be reasonable for this emissions unit.

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

- (3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is daily pressure drop monitoring across the baghouse and weekly visible emission checks. When the daily pressure drop readings and/or the weekly visible emission checks 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.

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

- (4) 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, the permittee shall promptly notify the Ohio EPA Central District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing 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]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit deviation reports that identify any of the following occurrences:
- a. each day, during which the pressure drop across the baghouse filter did not comply with the allowable range specified in c)(1), above;
  - b. each day during which an inspection was not performed by the required frequency specified in d)(1) and d)(2), excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - c. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

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

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

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

f) Testing Requirements

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



a. Emission Limitation:

PE from the baghouse stack shall not exceed 1.0 lb/hr.

Applicable Compliance Method:

Compliance with the hourly PE limitation may be determined from the maximum uncontrolled emission rate of 170 lbs dust/hr multiplied by the assumed baghouse control efficiency of 99.5% (1 - 0.995) to obtain the controlled hourly PE rate.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

PE from the baghouse stack shall not exceed 4.3 tons/yr.

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

g) Miscellaneous Requirements

(1) None.



5. P020, Core Baking Station

Operations, Property and/or Equipment Description:

electric core baking station in graphite cope

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08340) | Fugitive particulate emissions (PE) shall not exceed 0.99 lb/hr and 4.3 tons/yr.<br><br>Fugitive PM10 emissions shall not exceed 0.83 lb/hr and 3.6 tons/yr.<br><br>OC emissions shall not exceed 0.34 lb/hr and 1.49 tons/yr.<br><br>See b)(2)a and c)(1) below. |
| b. | OAC rule 3745-17-08(B)                      | See b)(2)b below.   |
| c. | OAC rule 3745-17-07(B)                      | See b)(2)c below.   |
| d. | OAC rule 3745-17-07(A)                      | Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.   |
| e. | OAC rule 3745-21-07(G)                      | See b)(2)d below.   |

(2) Additional Terms and Conditions

a. The emission limitations of 0.99 lb PE/hr, 4.3 tons PE/yr, 0.83 lb PM10/hr, 3.6 tons PM10/yr, 0.34 lb OC/hr and 1.49 tons OC/yr were established in PTI 01-08340 to reflect the potential to emit for the core baking station. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with these limits.

- b. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
  - c. This emissions unit is exempt from the visible fugitive PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(d) because the emissions unit is not subject to the requirements of OAC rule 3745-17-08(B).
  - d. This emissions unit employs a solid phenolic resin flake; therefore, pursuant to paragraph (C)(3) of OAC 3745-21-01, the requirements of OAC rule 3745-21-07(G) do not apply to this emissions unit.
- c) Operational Restrictions
- (1) The permittee shall employ only electric heat as a heat source in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain records for each day during which something other than an electric oven was employed in this emissions unit as a heat source in this emissions unit.
  - (2) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit-to-install (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.  
  
[ORC 3704.03(F)(3)(c) and F(4)]
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
  - (2) The permittee shall submit deviation (excursion) reports that identify each day when something other than an electric oven is employed in this emissions unit as a heat source. These reports shall be submitted within 30 days after the occurrence.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:  
Particulate emissions (PE) shall not exceed 0.99 lb/hr and 4.3 tons/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by using an emission factor of 0.65 lb PE/ton sand (SCC 3-04-007-06 for sand handling in a steel foundry) multiplied by the process weight of 1.54 tons sand/hr.

The annual emission limitation was determined by multiplying the hourly emission limitation by 8,760 hours/hr and multiplying by a conversion factor of 1 ton/2,000 lbs.

b. Emission Limitation:

Particulate matter with diameter less than 10 microns (PM-10) shall not exceed 0.83 lb/hr and 3.6 tons/yr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by using an emission factor of 0.54 lb PM-10/ton sand (SCC 3-04-007-06 for sand handling in a steel foundry) multiplied by the process weight of 1.54 tons sand/hr.

The annual emission limitation was determined by multiplying the hourly emission limitation by 8,760 hours/hr and multiplying by a conversion factor of 1 ton/2,000 lbs.

c. Emission Limitation:

Organic compound (OC) emissions shall not exceed 0.34 lb/hr and 1.49 tons/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by using the emission factor of 0.22 lb phenol/ton sand and 0.002 lb formaldehyde/ton sand (Borden 11/3/1995 letter) multiplied by the process weight of 1.54 tons sand/hr.

The annual emission limitation was determined by multiplying the hourly emission limitation by 8,760 hours/hr and multiplying by a conversion factor of 1 ton/2,000 lbs.

d. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

- (1) None.



**8. P021, Pressure Pouring Station**

**Operations, Property and/or Equipment Description:**

pressure pouring station with pressure release vent

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08239) | <p>Particulate emissions (PE) from the pressure release vent stack shall not exceed 4.2 lbs/hr and 18.4 tons/yr.</p> <p>PM10 emissions from the pressure release vent stack shall not exceed 2.1 lbs/hr and 9.2 tons/yr.</p> <p>NOx emissions from the pressure release vent stack shall not exceed 0.4 lb/hr and 1.8 tons/yr.</p> <p>OC emissions from the pressure release vent stack shall not exceed 0.6 lb/hr and 2.6 tons/yr.</p> <p>SO2 emissions from the pressure release vent stack shall not exceed 0.8 lb/hr and 3.7 tons/yr.</p> <p>See (2)a below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).</p> |
| b. | OAC rule 3745-17-11(B)(1)                   | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |
| c. | OAC rule 3745-17-07(A)                      | Visible PE from the pressure relief vent   |



|    | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures          |
|----|-------------------------------|--|
|    |                               | stack shall not exceed 20% opacity, as a 6-minute average. |
| d. | OAC rule 3745-17-08(B)        | See (2)b below.  |
| e. | OAC rule 3745-17-07(B)        | See (2)c below.  |

(2) Additional Terms and Conditions

- a. The short term limitations of 4.2 lbs PE/hour, 2.1 lbs PM10/hr, 0.4 lb NOx/hr, 0.6 lb OC/hr and 0.8 lb SO2/hr were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with these limits.
- b. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.
- c. Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall perform monthly\* checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

\*Based on the method of operation of this emissions unit, visible emissions from this emissions unit are expected to be minimal (see f)(2)); therefore, a monthly visible check is deemed to be reasonable for this emissions unit.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3)]

f) Testing Requirements

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

a. Emission Limitations:

PE shall not exceed 4.2 lbs/hr and 18.4 tons/yr.

Applicable Compliance Method:

Compliance with the hourly allowable emission limitation may be demonstrated by multiplying 0.1 lb PE/ton (electric induction furnace emission factor SCC 30400705) by 42 tons steel/hr (maximum pressure pouring rate).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-5.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

b. Emission Limitations:

PM10 emissions shall not exceed 2.1 lbs/hr and 9.2 tons/yr.

Applicable Compliance Method:

The hourly allowable PM10 emission limitation may be demonstrated by multiplying 0.09 lb PE/ton (SCC 30400705 emission factor for electric induction

furnace) by 42 tons steel/hr (maximum process weight rate) and by (1.0 - 0.45) (assumed 45 percent control efficiency of the enclosure in graphite mold).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 201.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

c. Emission Limitations:

NOx emissions shall not exceed 0.4 lb/hr and 1.8 tons/yr.

Applicable Compliance Method:

The hourly allowable NOx emission limitation may be demonstrated by multiplying 0.01 lb NOx/ton (SCC 30400708 emission factor for hot metal pouring) by 42 tons steel/hr (maximum process weight rate).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

d. Emission Limitations:

OC emissions shall not exceed 0.6 lb/hr and 2.6 tons/yr.

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation may be demonstrated by multiplying 0.14 lb OC/ton (SCC 3-04-007-08 emission factor for hot metal pouring) by 42 tons steel/hr (maximum process weight rate) and by (1 - 0.9) (assumed 90% control for enclosed pressure pour in graphite mold in lieu of sand molds).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 25A.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission

limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

e. Emission Limitations:

SO<sub>2</sub> emissions shall not exceed 0.8 lb/hr and 3.7 tons/yr.

Applicable Compliance Method:

The hourly allowable SO<sub>2</sub> emission limitation may be demonstrated by multiplying 0.02 lb SO<sub>2</sub>/ton (SCC 30400708 emission factor for hot metal pouring) by 42 tons steel/hr (maximum process weight rate).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 6.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

f. Emission Limitation:

Visible PE from the pressure relief vent stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule

- (2) The Pressure Pouring Station (P021) operates using pressurized air over molten metal to force the metal into molds and emissions only occur when the pressure is released. The emission limitations for this emissions unit were established using conservative values for hot metal pouring. The 4 inch diameter pressure relief stack pipe coupled with the cyclical nature of the volumetric air flow resulting from system pressure swings would make stack sampling extremely difficult, if not impossible. For these reasons, emission testing is not required for this emissions unit.

g) Miscellaneous Requirements

- (1) None.



**9. Emissions Unit Group - Cope and Drag Cleaners: P002, P003,**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| P002         | cope cleaner vented to baghouse 7                        |
| P003         | drag cleaner vented to baghouse 10                       |

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 operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | <b>Applicable Rules/Requirements</b>      | <b>Applicable Emissions Limitations/Control Measures</b>   |
|----|---|--|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 01-333) | Particulate emissions (PE) from each baghouse stack shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.<br><br>See b)(2)a below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(1). |
| b. | OAC rule 3745-17-07(A)(1)                 | Visible PE from each baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.   |
| c. | OAC rule 3745-17-11(B)(1)                 | PE from each baghouse stack shall not exceed 5.2 lbs/hr based upon curve P-1 of Figure II.<br><br>See b)(2)b below.  |

(2) Additional Terms and Conditions

- a. The permittee shall operate each baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.
- b. Pursuant to OAC rule 3745-17-11(B)(1), this emissions unit is limited to those PE rates established by curve P-1 of Figure II. The PE limitation of 5.2 lbs/hr was

calculated using the uncontrolled mass rate of emissions (UMRE) and interpolating from the x-axis to the y-axis using curve P-1 of Figure II. The calculated UMRE was determined at the maximum process weight rate of 3.6 tons sand/day multiplied by 2,000 lbs/ton, by 0.10 (assumed 10% dust generated), and by 1 day/24 hrs to yield an UMRE of 30 lbs PE/hr.

c) Operational Restrictions

- (1) The pressure drop across baghouse 7 and 10 serving these emissions units shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record:
  - a. pressure drop across each baghouse for each day of operation; and
  - b. a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.

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

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations,
  - d. the cause of the abnormal emissions;
  - e. the total duration of any visible emission incident; and
  - f. any corrective actions taken to or eliminate the visible emissions.

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

- (3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is daily pressure drop monitoring across the baghouse and weekly visible emission checks. When the daily pressure drop readings and/or the weekly visible emission checks 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.

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

- (4) 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, the permittee shall promptly notify the Ohio EPA Central District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing 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]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit deviation reports that identify any of the following occurrences:
- a. each day, during which the pressure drop across each baghouse did not comply with the allowable range specified in c)(1), above;
  - b. each day during which an inspection was not performed by the required frequency specified in d)(1) and d)(2), excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - c. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

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

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

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

f) Testing Requirements

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

a. Emission Limitation:

PE from each baghouse stack shall not exceed 0.01 gr/dscf and 5.2 lbs/hr in exhaust gases.

Applicable Compliance Method:

The permittee conducted USEPA Methods 5 and 9 testing on stack emissions from baghouse 7 on March 3, 2009 and from baghouse 10 on March 4, 2009 and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on April 8, 2009.

The emission testing shall be conducted within 12 months prior to permit expiration. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

- i. The following test methods shall be employed to demonstrate compliance with the allowable mass particulate emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.
- ii. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.
- iii. 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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).
- iv. Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test, 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.
- v. 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, Central District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

b. Emission Limitation:

Visible PE from each baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

**10. Emissions Unit Group - Cope and Drag Spray: P010, P011**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b>             |
|--------------|--|
| P010         | spray coating of cope mold vented to spray booth exhaust filter CE8  |
| P011         | spray coating of drag mold vented to spray booth exhaust filter CE11 |

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)(2)b., c)(1), c)(2), and d)(1) through d)(5).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08678) | Particulate emissions (PE) from each spray booth exhaust filter stack shall not exceed 2.6 lbs/hr and 11.5 tons/yr.<br><br>PM10 emissions from each spray booth exhaust filter stack shall not exceed 1.6 lbs/hr and 6.8 tons/yr.<br><br>See b)(2)a and b)(2)b below.<br><br>Visible emissions from each spray booth exhaust filter stack shall not exceed 10% opacity, as a 6-minute average. |
| b. | OAC rule 3745-17-07(A)(1)                   | The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |
| c. | OAC rule 3745-17-11(C)                      | See b)(2)a below.  |

(2) Additional Terms and Conditions

a. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.

[OAC rule 3745-17-11(C)]

- b. The permittee shall operate the dry particulate filter system whenever these emissions units are in operation.

[OAC rule 3745-17-11(C)(1)] [OAC rule 3745-77-07(C)(1)]

c) Operational Restrictions

- (1) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.

[OAC rule 3745-17-11(C)(1) and (2)(b)] [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

[OAC rule 3745-17-11(C)(2)(e)]

d) Monitoring and/or Recordkeeping Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[OAC 3745-17-11(C)(2)(a)]

- (3) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

[OAC rule 3745-17-11(C)(2)(c)]

- (4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[OAC rule 3745-17-11(C)(2)(c)]

- (5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[OAC rule 3745-17-11(C)(2)(d) and (f)]

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

[OAC rule 3745-17-11(C)(2)(f) and (g) for OAC rule 3745-17-11(C)(1)].

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit deviation reports that identify any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions units were in operation.

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

OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitations:

PE from each spray booth exhaust filter stack shall not exceed 2.6 lbs/hr and 11.5 tons/yr.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying 12.5 gallons/hr (maximum application rate) by 12.5 lbs/gallon (coating density) by 0.56 lb solids/lb coating (solids content) by 0.2 lb overspray/lb coating and by 0.15 (1- 0.85 filter control efficiency).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-5.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

b. Emission Limitations:

PM10 from each spray booth exhaust filter stack shall not exceed 1.6 lbs/hr and 6.8 tons/yr.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum application rate of 12.5 gallons of coating applied per hour by 12.5 lbs coating per gallon by 0.56 lb solids/lb coating by 0.2 lb overspray/lb coating applied multiplied by 0.6 (ratio PM10/PM) and by 0.15 (1- 0.85 filter control efficiency).

If required, the permittee shall demonstrate compliance through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 201.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

c. Emission Limitations:

Visible emissions from each exhaust filter stack shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- g) Miscellaneous Requirements
  - (1) None.

**11. Emissions Unit Group - Electric Arc Furnace #1 & #2: P901, P902,**

| EU ID | Operations, Property and/or Equipment Description              |
|-------|--|
| P901  | electric arc furnace No.1 vented to baghouse 1 (19.5 tons/hr)  |
| P902  | electric arc furnace No. 2 vented to baghouse 1 (19.5 tons/hr) |

- 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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-12147) | <p>The combined stack emissions from P901 and P902 shall not exceed 12.7 lbs PM<sub>10</sub>/hr.</p> <p>The combined stack emissions from P901 and P902 shall not exceed 6.8 lbs sulfur dioxide (SO<sub>2</sub>)/hr.</p> <p>The combined stack emissions from P901 and P902 shall not exceed 12.9 lbs NOx/hr.</p> <p>The combined stack emissions from P901 and P902 shall not exceed 101.4 lbs carbon monoxide (CO)/hr.</p> <p>The combined stack emissions from P901 and P902 shall not exceed 11.7 lbs organic compounds (OC)/hr.</p> <p>The combined stack emissions from P901 and P902 shall not exceed 0.027 pound lead (Pb)/hr.</p> <p>See b)(2)a and 13.b)(2)b.</p> |
| b. | OAC rule 3745-17-07(A)(1)                   | See b)(2)c.   |
| c. |   |   |

|    | Applicable Rules/Requirements   | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
|    | OAC rule 3745-17-11(B)(1)   | See b)(2)c.  |
| d. | OAC rule 3745-17-08(B)  | None, see b)(2)d.  |
| e. | OAC rule 3745-17-07(B)(3)   | None, see b)(2)e.  |
| f. | OAC rule 3745-31-05(D)<br>(synthetic minor to avoid non-attainment new source review) | <p>The combined stack emissions from P901 and P902 shall not exceed 41.7 tons PM<sub>10</sub>/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined fugitive emissions from P901 and P902 shall not exceed 58.0 tons PM<sub>10</sub>/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined stack and fugitive emissions from P901 and P902 shall not exceed 23.9 tons SO<sub>2</sub>/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined stack and fugitive emissions from P901 and P902 shall not exceed 45.2 tons NO<sub>x</sub>/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined stack and fugitive emissions from P901 and P902 shall not exceed 357 tons CO/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined stack emissions from P901 and P902 shall not exceed 41.1 tons OC/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined stack emissions from P901 and P902 shall not exceed shall not exceed 0.089 ton Pb/yr, based on a rolling, 12-month summation of monthly production rates.</p> <p>The combined fugitive emissions from P901 and P902 shall not exceed 0.124 ton Pb /yr, based on a rolling, 12-month</p> |

|    | Applicable Rules/Requirements                          | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
|    |  | summation of monthly production rates.<br><br>The combined stack and fugitive emissions from P901 and P902 shall not exceed 6.78 ton total metal HAP/yr, based on a rolling, 12-month summation of monthly production rates.<br><br>See b)(2)f. and c)(1), below. |
| g. | OAC rule 3745-31-10(c)                                 | See Part B.2.   |
| h. | 40 CFR Part 64 – Compliance Assurance Monitoring (CAM) | See b)(2)g. below.  |

(2) Additional Terms and Conditions

- a. The visible particulate emissions from the baghouse stack serving this emissions unit shall not exceed 0 percent opacity, as a 6-minute average, when one or more of the emissions units are in operation.
- b. Visible fugitive particulate emissions from the roof monitor shall not exceed 20 percent opacity, as a 6-minute average, during any one hour observation period.  
  
(OAC rule 3745-31-05(A)(3) )
- c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- d. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).  
  
[OAC 3745-17-08(A)(1)]
- e. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.  
  
[OAC 3745-17-07(B)(11)(e)]
- f. The hourly emission limitations for NO<sub>x</sub>, CO, SO<sub>2</sub>, OC and Pb were established in PTI 01-12147 to reflect the potential to emit for these emissions units. Therefore, it is not necessary to develop additional record keeping and/or reporting requirements to ensure compliance with this limit.

- g. Particulate emissions are regulated under 40CFR Part 63 ZZZZZ, as a surrogate for metal HAPs, which requires continuous compliance determination methods that would satisfy CAM for particulate emissions. Under 40 CFR 64.2(b)(1)(i), emission limitations or standards for a pollutant proposed by the Administrator after November 15, 1990 are exempt from CAM monitoring requirements pursuant to Section 111 or 112 of the Clean Air Act.

c) Operational Restrictions

- (1) The permittee requested a federally enforceable limitation on the annual production rate for purposes of limiting potential to emit to avoid non-attainment new source review. Emissions units P901 and P902 have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the monthly production rate, upon issuance of this permit. The maximum annual production rate for emissions units P901 and P902 shall not exceed 256,500 tons based upon a rolling, 12-month summation of the monthly production rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions units are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

Pressure Drop Range is 3 - 10 inches of water.

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;

- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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.

This range or limit on the pressure drop across the baghouse is 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 limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled 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 into this permit by means of an administrative modification.

- (2) 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 electric arc furnace shop roof monitors serving this emissions unit. The visible emission checks shall be performed during periods when visible particulate emissions are expected to occur (e.g., during tapping or lancing operations for the electric arc furnace). The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color and location of the emissions;
- b. the operation(s) occurring during the visible emission observation (e.g., tapping or lancing of the electric arc furnace).
- c. whether the emissions are representative of normal operations;
- d. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- e. the total duration of any visible emission incident; and
- f. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (e) above or continue the visible emission check until the incident has ended. The observer may indicate that the visible emission 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.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
- (4) The permit to install for these emissions units P901 and P902 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions units, (as determined from the raw materials processed) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: manganese

TLV (mg/m<sup>3</sup>): 0.2

Maximum Hourly Emission Rate (lbs/hr): 0.58

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2.64

MAGLC (ug/m<sup>3</sup>): 4.78

The permittee, has demonstrated that emissions of manganese from emissions units P901 and P902, was calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification"

under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time when the pressure drop across the baghouse was outside of the established range;
  - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive dust emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

[OAC rule 3745-17-07(A) and(B)] or [OAC rule 3745-77-07(A)(3)]

- (4) The permittee shall submit a quarterly deviation (excursion) report that identifies all exceedances of the rolling, 12-month steel production rate.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

- (5) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration in the quarterly deviation (excursion) reports. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70.

f) Testing Requirements

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

a. Emission Limitations:

The combined stack emissions from P901 and P902 shall not exceed 11.7 lbs OC/hr.

Applicable Compliance Method:

Compliance with this emissions limitation may be determined through the use of an emission factor of 0.30 lb OC/ton (Columbus plant emission factor) multiplied by 39 tons steel per hour (maximum hourly process rate) equal the stack emissions of 11.7 lbs/hr.

If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 25a for OC emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitations:

The combined stack emissions from P901 and P902 shall not exceed 0.027 pound lead (Pb)/hr.

Applicable Compliance Method:

Compliance with this emissions limitation may be determined through the use of a controlled emission factor for EAF steel processing of 0.000693 lbPb/ton steel (Columbus plant emission factor) multiplied by 39 tons steel per hour (maximum hourly process rate).  $0.000693 \text{ lb Pb/ton} * 39 \text{ tons/hr} = 0.027 \text{ lb Pb/hr}$

If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 29 for Pb emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

c. Emission Limitations:

The combined stack and fugitive emissions from P901 and P902 shall not exceed 45.2 tons NOx/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the monthly production records, in tons of steel, for P901 and P902 shall be multiplied by the

emission factor of 0.33 lb NO<sub>x</sub>/ton (Columbus plant emission factor) and divided by 2,000 lbs/ton to yield the stack emission rate. The stack emission rate, in tons, may be divided by the hooding capture efficiency (0.935) to yield the total emission rate, in tons, from which the stack emission rate is subtracted to yield the fugitive emission rate in tons that is added back to the stack emission rate to yield the total emission rate in tons. The total potential emissions may be calculated as follows:

$$42.3 \text{ ton NO}_x / 0.935 = 45.2 - 42.3 = 2.9 \text{ tons(fugitive)/yr} + 42.3 \text{ tons/yr} = 45.2 \text{ tons NO}_x/\text{yr}.$$

d. Emission Limitations:

The combined stack and fugitive emissions from P901 and P902 shall not exceed 357 tons CO/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the cumulative monthly production records for P901 and P902 shall be multiplied by the emission factor of 2.6 CO/ton (Columbus plant emission factor) and divided by 2,000 lbs/ton to yield the annual emission rate.

If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 10 for CO emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. Emissions Limitation:

The combined stack emissions from P901 and P902 shall not exceed 12.7 lbs PM<sub>10</sub>/hr.

Applicable Compliance Method:

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

- i. The emission testing shall be conducted within 3 months following permit issuance and 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.
- iv. The test(s) shall be conducted while emissions units P901 and P902 are operating at or near maximum capacity, unless otherwise specified or

approved by the Ohio EPA, Central District Office. Unless the emission tests are conducted with both emissions units in operation, the number of emissions units in operation during any emissions tests shall be representative of the number of emissions units typically in operation.

- v. 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).
- vi. Personnel from the Ohio EPA, Central 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.
- vii. 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, Central 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, Central District Office.

f. Emission Limitations:

The combined stack emissions from P901 and P902 shall not exceed 6.8 lbs SO<sub>2</sub>/hr.

Applicable Compliance Method:

The permittee had conducted USEPA Method 6 testing on stack emissions from EAF dust collector on December 5, 2006 and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on February 1, 2007.

Compliance with this emissions limitation may be determined through the use of an emission factor of 0.174 lb SO<sub>2</sub>/ton (Columbus plant emission factor) multiplied by 39 tons steel per hour (maximum hourly process rate) equal the stack emissions of 6.8 lbs/hr.

If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 6 for SO<sub>2</sub> emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

g. Emissions Limitation:

The combined stack emissions from P901 and P902 shall not exceed 12.9 lbs NO<sub>x</sub>/hr.

Applicable Compliance Method:

The permittee had conducted USEPA Method 7 testing on stack emissions from EAF dust collector on December 6, 2006, and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on February 1, 2007.

Compliance with this emissions limitation may be determined through the use of an emission factor of 0.33 lb NO<sub>x</sub>/ton (Columbus plant emission factor) multiplied by 39 tons steel per hour (maximum hourly process rate) equal the stack emissions of 12.9 lbs/hr.

If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 7 for NO<sub>x</sub> emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

h. Emission Limitations:

The combined stack emissions from P901 and P902 shall not exceed 101.4 lbs CO/hr.

Applicable Compliance Method:

The permittee had conducted USEPA Method 10 testing on stack emissions from EAF dust collector on December 6, 2006, and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on February 1, 2007.

Compliance with this emissions limitation may be determined through the use of an emission factor of 2.6 lb CO/ton (Columbus plant emission factor) multiplied by 39 tons steel per hour (maximum hourly process rate) equal the stack emissions of 101.4 lbs/hr.

If required, the following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: 40 CFR Part 60, Appendix A, Methods 1-4 and 10 for CO emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

i. Emission Limitations:

The combined stack and fugitive emissions from P901 and P902 shall not exceed 41.1 tons OC/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual stack emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the cumulative monthly production records for P901 and P902 shall be multiplied by the emission factor of 0.30 lb OC/ton (Columbus plant emission factor) and divided by 2,000 lbs/ton to yield the stack emission rate. The stack emission rate, in tons, may be divided by the hooding capture efficiency (0.935) to yield the total emission rate, in tons, from which the stack emission rate is subtracted to yield the fugitive emission rate in tons that is added back to the stack emission rate to yield the total emission rate in tons. The total potential emissions may be calculated as follows:

$$38.4 \text{ tons OC} / 0.935 = 41.1 - 38.4 = 2.7 \text{ tons(fugitive)/yr} + 38.4 \text{ tons/yr} = 41.1 \text{ tons OC tons/yr.}$$

j. Emission Limitations:

The combined stack and fugitive emissions from P901 and P902 shall not exceed 23.9 tons SO<sub>2</sub>/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the cumulative monthly production records for P901 and P902 shall be multiplied by the emission factor of 0.174 lb SO<sub>2</sub>/ton (Columbus plant emission factor) and divided by 2,000 lbs/ton to yield the stack emission rate. The stack emission rate, in tons, may be divided by the hooding capture efficiency (0.935) to yield the total emission rate, in tons, from which the stack emission rate is subtracted to yield the fugitive emission rate in tons that is added back to the stack emission rate to yield the total emission rate in tons. The total potential emissions may be calculated as follows:

$$22.3 \text{ tons SO}_2 / 0.935 = 23.9 - 22.3 = 1.6 \text{ tons(fugitive)/yr} + 22.3 \text{ tons/yr} = 23.9 \text{ tons SO}_2/\text{yr.}$$

k. Emissions Limitation:

The combined stack emissions from P901 and P902 shall not exceed 41.7 tons PM<sub>10</sub> /yr, based on a rolling, 12-month summation of monthly production rates.;

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the cumulative monthly production records for P901 and P902.

$$0.325 \text{ lb PM}_{10}/\text{ton} * 256,500 \text{ tons steel/yr} * 1 \text{ ton}/2,000 \text{ lb} = 41.7 \text{ tons PM}_{10}/\text{yr}$$

l. Emissions Limitation:

Fugitive PM<sub>10</sub> shall not exceed 58.0 tons/yr, based on a rolling, 12-month summation of monthly emission rates, based on a rolling, 12-month summation of monthly production rates.;

Applicable Compliance Method:

Compliance with the annual emissions limitation may be determined through the use of the controlled annual emission rate in tons from f)(1)k above multiplied by the inverse of the percent control efficiency across the baghouse that is multiplied by the inverse of the percent capture efficiency of the hooding to derive the total uncontrolled fugitive emission rate multiplied by the percent fugitives.

fugitive:  $(41.7 \text{ tons PM}_{10} / (1 - 0.95 \text{ baghouse efficiency})) = 834 \text{ tons} / 0.935 \text{ capture efficiency} = 891.9 \text{ tons PM}_{10} * (0.065) = 58.0 \text{ tons PM}_{10}/\text{yr (fugitive)}$

m. Emission Limitations:

Pb emissions from the electric arc furnace baghouse stack shall not exceed 0.089 ton/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the cumulative monthly production records for P901 and P902 shall be multiplied by 0.000693 lb Pb/ton (Columbus plant emission factor).

n. Emission Limitation:

Fugitive Pb emissions shall not exceed 0.124 ton/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual emissions limitation may be determined through the use of the controlled annual emission rate in tons from f)(1)m above multiplied by the inverse of the percent control efficiency across the baghouse that is multiplied by the inverse of the percent capture efficiency of the hooding to derive the total uncontrolled fugitive emission rate multiplied by the percent fugitives.

o. Emission Limitation:

The permittee shall not discharge emissions into the atmosphere from any metal melting furnace or group of all metal melting furnaces that exceed 0.8 pounds of particulate emissions (PE) or 0.06 pounds of total metal HAP per ton of metal charged.

Applicable Compliance Method:

The permittee may choose to submit the results of a prior performance test for PM or total metal HAP that demonstrates compliance with the applicable emissions limit for a metal melting furnace or group of all metal melting furnaces provided the test was conducted within the last 5 years using the methods and procedures specified in this subpart and either no process changes have been made since the test, or the results of the performance test, with or without adjustments, reliably demonstrate compliance with the applicable emissions limit despite such process changes.

If the permittee chooses to submit the results of a prior performance test, a written notification must be submitted to the Administrator of the intent to use the previous test data no later than 60 days after the compliance date. The notification must contain a full copy of the performance test and contain information to demonstrate, if applicable, that either no process changes have been made since the test, or that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite such process changes.

(40CFR 63 Subpart ZZZZZ § 63.10898)

p. Emission Limitation:

The combined stack and fugitive emissions from P901 and P902 shall not exceed 6.78 tons total metal HAP/yr, based on a rolling, 12-month summation of monthly production rates.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be based on record keeping in d)(5), from which the rolling, 12-month summation of the cumulative monthly production records for P901 and P902 shall be multiplied by the emission factor in B.2.e)(3)a., plus a fugitive component for each metal HAP calculated as follows:

The permittee shall collect samples of baghouse dust when conducting TCLP testing for solid waste streams on a regular three year cycle and analyze the dust for the percentage of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium to confirm the percentages in B.2.e)(3)b.

The permittee shall calculate the fugitive emissions component for each metal from the percentages in B.2.e)(3)b by multiplying the percentages by the calculated hourly fugitive PM<sub>10</sub> component determined from Method 5 testing results. The hourly fugitive PM<sub>10</sub> component would be calculated by the following equation (lbs stack PM<sub>10</sub> / (1 - 0.95 baghouse efficiency) / 0.935 capture efficiency \* (0.065). The hourly rate shall be divided by the tons of metal melted to determine an emission factor for the fugitive component. All supporting test data, analyses and calculations shall be included with the test report.

q. Emission Limitation:

Fugitive visible particulate emissions from foundry operations shall not exhibit opacity greater than 20 percent (as a 6-minute average), except for one 6-minute average per hour that does not exceed 30 percent during any 60 minute observation period.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

For each metal melting furnace or group of all metal melting furnaces that is subject to an emissions limit and for each building or structure housing foundry operations that is subject to the opacity limit for fugitive emissions, the permittee shall conduct the test within 180 days of the compliance date and report the results in your notification of compliance status.

(40CFR 63 Subpart ZZZZZ § 63.10898)

r. Emission Limitation:

Visible PE from the electric arc furnace baghouse stack shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

g) Miscellaneous Requirements

(1) None.

**12. Emissions Unit Group - Graphite mold machining: P012, P013, P015, P016**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| P012         | mold machining 1 vented to baghouse 15                   |
| P013         | mold machining 2 vented to baghouse 15                   |
| P015         | mold machining 4 vented to baghouse 15                   |
| P016         | ingate lathe vented to baghouse 15                       |

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-333) | Particulate emissions (PE) from the baghouse stack shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.<br><br>See b)(2)a below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(1). |
| b. | OAC rule 3745-17-07(A)(1)                 | Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.   |
| c. | OAC rule 3745-17-11(B)(1)                 | PE from the baghouse stack shall not exceed 50 lbs/hr based upon curve P-1 of Figure II.<br><br>See b)(2)b below.   |

(2) Additional Terms and Conditions

a. The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.

- b. Pursuant to OAC rule 3745-17-11(B)(1), this emissions unit is limited to the PE rate established by curve P-1 of Figure II. The PE limit of 50 lbs/hr was calculated using the uncontrolled mass rate of emissions (UMRE) and interpolating from the x-axis to the y-axis using curve P-1 of Figure II. The calculated UMRE was listed in the permit to install application to be 2,540 lbs PE/hr.

c) Operational Restrictions

- (1) The pressure drop across baghouse 15 shall be maintained within the range of 3 to 11 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

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

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

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

- (2) The CAM plan for these emissions units (P012, P013, P015 and P016) has been developed for particulate emissions. The CAM performance indicator for the baghouse controlling these emissions units is daily pressure drop monitoring across the baghouse and weekly visible emission checks. When the daily pressure drop readings and/or the weekly visible emission checks show operation outside its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions units 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.

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

- (3) 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, the permittee shall promptly notify the Ohio EPA Central District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-

establishing 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]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving these emissions units and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

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

f) Testing Requirements

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

a. Emission Limitation:

Particulate emissions (PE) from the baghouse stack shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.

PE from the baghouse stack shall not exceed 50 lbs/hr.

Applicable Compliance Method:

The permittee conducted USEPA Methods 5 and 9 testing on stack emissions from baghouse #15 on March 19, 2009, and submitted a comprehensive written report demonstrating compliance with the emissions limitation to the Ohio EPA, Central District Office on April 17, 2009.

The permittee shall conduct, or have conducted, emission testing for this emissions unit 6 months prior to permit expiration in accordance with the following requirements:

- i. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- ii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.
- iii. The test(s) shall be conducted while emissions units P012, P013, P015 and P016 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office. Unless the emission tests are conducted with all 4 emissions units in operation, the

number of emissions units in operation during any emissions tests shall be representative of the number of emissions units typically in operation.

- iv. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the person who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test.
- v. Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test, 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.
- vi. A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

- b. Emission Limitation:  
Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:  
If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- g) Miscellaneous Requirements
  - (1) None.

**13. Emissions Unit Group - Hot Wheel Grinders #1, #2, & #3: P004, P005, P006,**

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| P004  | hot wheel grinder 1 vented to baghouse 17         |
| P005  | hot wheel grinder 2 vented to baghouse 17         |
| P006  | hot wheel grinder 3 vented to baghouse 17         |

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-6399)             | Particulate emissions (PE) from the baghouse stack shall not exceed 0.55 lb/hr and 2.4 tons/yr.<br><br>See b)(2)a below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |
| b. | OAC rule 3745-17-07(A)                                 | Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  |
|    | OAC rule 3745-17-11(B)(1)                              | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |
|    | OAC rule 3745-17-07(B)                                 | None, see b)(2)b below.  |
|    | OAC rule 3745-17-08(B)                                 | None, see b)(2)c below.  |
|    | 40 CFR Part 64 – Compliance Assurance Monitoring (CAM) | See d)(1) through d)(4), e)(1) and e)(2).  |

(2) Additional Terms and Conditions

a. The permittee shall maintain an enclosure around these emissions unit and ensure that the baghouse is operated with sufficient air volume to minimize or

eliminate visible emissions of fugitive dust at the point of capture to the extent possible with good engineering design.

- b. Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- c. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

c) Operational Restrictions

- (1) The pressure drop across baghouse 17 serving these emissions units shall be maintained within the range of 3 to 11 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record:
  - a. pressure drop across the baghouse for each day of operation; and
  - b. a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.

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

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

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

- (3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is daily

pressure drop monitoring across the baghouse and weekly visible emission checks. When the daily pressure drop readings and/or the weekly visible emission checks 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.

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

- (4) 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, the permittee shall promptly notify the Ohio EPA Central District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing 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]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day, during which the pressure drop across the exhaust filter did not comply with the allowable range specified in c)(1), above;
  - b. each day during which an inspection was not performed by the required frequency specified in d)(1) and d)(2), excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - c. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The quarterly deviation (excursion) 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 40 CFR, Part 64]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

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

f) Testing Requirements

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

a. Emission Limitation:

PE from the baghouse stack shall not exceed 0.01 gr/dscf and 0.55 lbs/hr in exhaust gases.

Applicable Compliance Method:

The permittee had conducted USEPA Methods 5 and 9 testing on stack emissions from baghouse #17 on March 3, 2009, and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on April 8, 2009.

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

- i. The emission testing shall be conducted within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.
- iv. The test(s) shall be conducted while emissions units P004, P005 and P006 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office. Unless the emission tests are conducted with all 3 emissions units in operation, the number of emissions units in operation during any emissions tests shall be representative of the number of emissions units typically in operation.
- v. 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).
- vi. Personnel from the Ohio EPA, Central 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.

- vii. 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, Central 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, Central District Office.

b. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

PE from the baghouse stack shall not exceed 2.4 tons/yr.

Applicable Compliance Method:

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

g) Miscellaneous Requirements

- (1) None.

**14. Emissions Unit Group - Hubcutters #1, #2 and #3: P007, P008, P009,**

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| P007  | hubcutter 1 vented to baghouse 4                  |
| P008  | hubcutter 2 vented to baghouse 4                  |
| P009  | hubcutter 3 vented to baghouse 4                  |

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-333) | Particulate emissions (PE) from the baghouse stack shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.<br><br>See b)(2)a below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(1). |
| b. | OAC rule 3745-17-07(A)                    | Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.   |
| c. | OAC rule 3745-17-11(B)(1)                 | PE from the baghouse stack shall not exceed 10.56 lbs/hr based upon curve P-1 of Figure II, see 16.b)(2)b below.  |
| d. | OAC rule 3745-17-07(B)                    | None, see b)(2)c below.   |
| e. | OAC rule 3745-17-08(B)                    | None, see b)(2)d below.   |

(2) Additional Terms and Conditions

a. The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible PE of fugitive dust at the point of capture to the extent possible with good engineering design.

- b. Pursuant to OAC rule 3745-17-11(B)(1), this emissions unit is limited to those PE rates established by curve P-1 of Figure II. The PE limit of 10.56 lbs/hr was calculated using the uncontrolled mass rate of emissions (UMRE) and extrapolating from the x-axis to the y-axis using curve P-1 of Figure II. The calculated UMRE was listed in the permit to install application to be 90 lbs PE/hr.
  - c. Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
  - d. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- c) Operational Restrictions
- (1) The pressure drop across baghouse 4 shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record:
    - a. pressure drop across the baghouse for each day of operation; and
    - b. a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.
  - (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
    - a. the color of the emissions;
    - b. whether the emissions are representative of normal operations;
    - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
    - d. the total duration of any visible emission incident; and
    - e. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each day, during which the pressure drop across the exhaust filter did not comply with the allowable range specified in c)(1), above;
  - b. each day during which an inspection was not performed by the required frequency specified in d)(1) and d)(2), excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - c. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

[OAC rule 77-07(A)(3)(c)] and [OAC rule 3745-17-07]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3)]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
PE from the baghouse stack shall not exceed 0.01 gr/dscf and 10.56 lbs/hr in exhaust gases.

Applicable Compliance Method:

The permittee had conducted USEPA Methods 5 and 9 testing on stack emissions from baghouse #4 on March 4 & 5, 2009, and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on April 8, 2009.

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

- i. The emission testing shall be conducted within 6 months prior to permit expiration.
  - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
  - iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR Part 60, Appendix A Methods 1-5. In addition, during each test run, visible emission readings shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
  - iv. The tests shall be conducted while emissions units P007, P008 and P009 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office. Unless the emission tests are conducted with all 3 emissions units in operation, the number of emissions units in operation during any emissions tests shall be representative of the number of emissions units typically in operation.
  - v. 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).
  - vi. Personnel from the Ohio EPA, Central 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.
  - vii. 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, Central 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, Central District Office.
- b. Emission Limitation:  
Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

- (1) None.

**15. Emissions Unit Group - Wheel cleaner, peener & chamfer: P017, P018, P022,**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| P017         | wheel cleaner vented to baghouse 5                       |
| P018         | wheel peener vented to baghouse 5                        |
| P022         | chamfer grinder vented to baghouse 5                     |

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 operations(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. 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 rule 3745-31-05(A)(3)<br>(PTI 01-08240) | Particulate emissions (PE) from the chamfer grinder (P022) to the baghouse stack shall not exceed 0.77 lb/hr and 3.4 ton/yr.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(1).<br><br>See b)(2)a below.   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 01-333)   | Particulate emissions (PE) from the wheel cleaner (P017) and wheel peener (P018) to the baghouse stack shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(1).<br><br>See b)(2)a below. |
| c. | OAC rule 3745-17-07(A)                      | Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.   |
| d. | OAC rule 3745-17-11(B)(1)                   | The emission limitation specified by this   |

|    | Applicable Rules/Requirements                          | Applicable Emissions Limitations/Control Measures  |
|----|--|--|
|    |  | rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| e. | 40 CFR Part 64 – Compliance Assurance Monitoring (CAM) | See d)(1) through d)(4), (e)(1) and (e)(2).  |

(2) Additional Terms and Conditions

- a. The permittee shall operate the baghouse and vent all emissions from emission unit P017, emission unit P018 and emission unit P022 to the baghouse whenever an emissions unit is in operation.

c) Operational Restrictions

- (1) The pressure drop across baghouse 5 serving these emissions units shall be maintained within the range of 4 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual. The permittee shall record:
  - a. the pressure drop across the baghouse for each day of operation; and
  - b. a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.

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

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

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

- (3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is daily pressure drop monitoring across the baghouse and weekly visible emission checks. When the daily pressure drop readings and/or the weekly visible emission checks 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.

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

- (4) 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, the permittee shall promptly notify the Ohio EPA Central District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing 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]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. each day, during which the pressure drop across the exhaust filter did not comply with the allowable range specified in c)(1), above;
  - b. each day during which an inspection was not performed by the required frequency specified in d)(1) and d)(2), excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - c. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The quarterly deviation (excursion) 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 40 CFR, Part 64]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this

emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

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

f) Testing Requirements

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

a. Emission Limitation:

PE from the baghouse stack shall not exceed 0.77 lb/hr from emission unit P022

Applicable Compliance Method:

The permittee had conducted USEPA Methods 5 and 9 testing on stack emissions from dust collector #5 on March 5, 2009 and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on April 8, 2009.

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

- i. The emission testing shall be conducted within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.
- iv. The test shall be conducted while emissions units P017, P018 and P022 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office. Unless the emission tests are conducted with all 3 emissions units in operation, the number of emissions units in operation during any emissions tests shall be representative of the number of emissions units typically in operation.
- v. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the person who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test.

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

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

- b. Emission Limitation:  
PE from the baghouse stack shall not exceed 3.4 tons per year from emission unit P022.

Applicable Compliance Method:

The annual emission limitation is developed by multiplying the hourly rate by 8,760 hours per year and the conversion factor of 1 ton/2,000 lbs.

- c. Emission Limitation:  
PE from the baghouse stack shall not exceed 0.01 gr/dscf in exhaust gases from emission unit P017 and emission unit P018.

Applicable Compliance Method:

The permittee had conducted USEPA Methods 5 and 9 testing on stack emissions from dust collector #5 on March 5, 2009 and submitted a comprehensive written report demonstrating compliance with the emissions limitations to the Ohio EPA, Central District Office on April 8, 2009.

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

- i. The emission testing shall be conducted within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR Part 60, Appendix A, Methods 1-5.
- iv. The test shall be conducted while emissions units P017, P018 and P022 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office. Unless the emission tests are conducted with all 3 emissions units in operation, the number of emissions units in operation during any emissions tests shall be representative of the number of emissions units typically in operation.

- v. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the person who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test.
- vi. Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test, 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.
- vii. A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

d. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

- (1) None.