



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

03/16/04

**RE: Proposed Title V Chapter 3745-77 Permit  
01-25-10-0987  
Griffin Wheel Co. - Columbus Plant**

Attn: Genevieve Damico AR-18J  
United States Environmental Protection Agency  
Region V  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Griffin Wheel Co. - Columbus Plant, has been created in Ohio EPA's State Air Resources System (STARS) on 03/16/04, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

  
Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: Central District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 03/16/04

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 01-25-10-0987 to: Griffin Wheel Co. - Columbus Plant 3900 Bixby Road Groveport, OH 43125

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like B001 (Normalizing Furnace), F001 (Lime Storage), F005 (Roadways), F006 (Slag Handling), F007 (Scrap Bin), P001 (Coated Sand System), P002 (Cope Cleaner), P003 (Drag Cleaner), P004 (Hot Wheel Grinder #1), P005 (Hot Wheel Grinder #2), P006 (Hot Wheel Grinder #3), P007 (Hubcutter #1), P008 (Hubcutter #2), P009 (Hubcutter #3), P010 (Cope Spray), P011 (Drag Spray), P012 (Mold Machining #1), P013 (Mold Machining #2), P015 (Mold Machining #4), P016 (Ingate Lathe), P017 (Cleaner (Shot Blast)), P018 (Peener (Shot Blast)), P019 (East King Mill), P020 (Core Baking Station), P021 (Pressure Pouring Station), P022 (Chamfer Grinder), P901 (Electric Arc Furnace #1), P902 (Electric Arc Furnace #2), and P903 (Ladle Metallurgy Furnace).

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

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

Central District Office  
3232 Alum Creek Drive  
PO Box 1049  
Columbus, OH 43216-1049  
(614) 728-3778

OHIO ENVIRONMENTAL PROTECTION AGENCY

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Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **Monitoring and Related Record Keeping and Reporting Requirements**

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c. The permittee shall submit required reports in the following manner:

- i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

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

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted 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 reports shall satisfy the requirements (in part) 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. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

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 overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

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

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

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

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be

submitted 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.

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

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

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

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

## **2. Scheduled Maintenance**

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

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

## **3. Risk Management Plans**

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

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

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

## **4. Title IV Provisions**

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

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

**5. Severability Clause**

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

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

**6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. Fees**

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

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

**8. Marketable Permit Programs**

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

*(Authority for term: OAC rule 3745-77-07(A)(9))*

**9. Reasonably Anticipated Operating Scenarios**

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

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

**10. Reopening for Cause**

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

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

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

**11. Federal and State Enforceability**

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

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

**12. Compliance Requirements**

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

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

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

### **13. Permit Shield**

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

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

### **14. Operational Flexibility**

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

air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).  
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

**15. Emergencies**

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

**16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

**17. Compliance Method Requirements**

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

(This term is provided for informational purposes only.)

**18. Insignificant Activities**

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

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

**19. Permit to Install Requirement**

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.  
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.  
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**21. Permanent Shutdown of an Emissions Unit**

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

If 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 monitoring, record keeping, reporting, or testing 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.

**B. State Only Enforceable Section**

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

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

**2. Records Retention Requirements**

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

**3. Inspections and Information Requests**

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

**4. Scheduled Maintenance/Malfunction Reporting**

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

**5. Permit Transfers**

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

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

- a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;
- 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; and
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforceable Section

#### 1. 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 10 tons/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 additional emission testing and compliance demonstration requirements specified in Part II of this Title V permit. 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 Section A.3.d.

In addition, the permittee is required to submit and implement its "Melted Metals Scrap Specifications" plan 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.

#### 2. 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 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  $(8.5 + 1.48) = 9.98$  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 section A.3.a 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.

**A. State and Federally Enforceable Section (continued)**

**3. Facility-wide combined HAP potential to emit**

a. Organic HAP emission limitations:

Per Section A.2, the facility-wide organic HAP emissions may be estimated as:  $8.5 (P001) + 1.49 (P020) + 0.81^* (P021) = 10.8 \text{ TPY}$ .

\* 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 =  $0.416 \text{ lb HAP} / 1.34 \text{ lbs VOC} = 0.31$

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

b. Lead (Pb) emission limitations for P901, P902:

The terms and conditions for the EAFs (P901 and P902) each contain federally enforceable lead (Pb) emission limitations from PTI 01-7377 of 0.21 ton/yr stack Pb emissions and 0.22 ton/yr fugitive Pb emissions. Therefore potential Pb emissions from P901 and P902 are:  $(2 \times 0.21) + (2 \times 0.22) = 0.86 \text{ TPY Pb}$ .

c. HAP metals potential to emit:

The permittee has provided stack testing data for HAP metals conducted for an EAF at a Griffin Wheel facility in Bessemer, Alabama. The permittee has attested to the similar scrap quality at the Bessemer and Columbus facilities. The permittee also analyzed baghouse dust samples taken during the Bessemer stack testing and the analysis of these samples has been used to estimate fugitive emissions of HAP metals.

i. The following percentages of HAP metal emissions to total particulate emissions were established based on the Bessemer stack testing: antimony (0.0035%), arsenic (0%), beryllium (0%), cadmium (0.0199%), chromium (0.2888%), cobalt (0.0094%), manganese (2.6851%), mercury (0.1438%), nickel (0.7435%), and selenium (0%). These percentages were divided by 100 and then multiplied by the federally enforceable PM-10 emission limitations from PTI 01-7377 for P901 and P902 (8.67 lbs PM-10/hr) and P903 (1.9 lbs PM-10/hr), multiplied by 8760 hrs/yr 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 values of 1.48 TPY HAP metals each for P901 and P902 and 0.32 TPY HAP metals for P903. Therefore, total HAP metal stack emissions are estimated to be:  $(1.48 + 1.48 + 0.32) = 3.28 \text{ TPY}$ .

ii. The following percentages of HAP metals are based on the analysis of baghouse dust samples taken during the Bessemer stack testing: antimony (0.0001%), arsenic (0.0027%), beryllium (0%), cadmium (0.0086%), chromium (0.043%), cobalt (0.0012%), manganese (4.25%), mercury (0.00005%), nickel (0.01%), and selenium (0%). These percentages were divided by 100 and then multiplied by the federally enforceable fugitive PM-10 emission limitations from PTI 01-7377 for P901 and P902 (9.24 lbs PM-10/hr which is equivalent to 40.5 tons/yr at 8760 hrs/yr), multiplied by 8760 hrs/yr 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 1.75 TPY HAP metals each for P901 and P902. Therefore, total HAP metal fugitive emissions are:  $(1.75 + 1.75) = 3.50 \text{ TPY}$ .

d. The total facility-wide HAP potential to emit may be calculated as the sum of (a) through (c) above as follows:  $(10.88 + 0.86 + 3.28 + 3.50) = 18.44 \text{ TPY}$

e. The total facility-wide HAP potential to emit will be verified through the additional emission testing specified in Section A.4 below.

**A. State and Federally Enforceable Section (continued)**

4. The permittee shall conduct, or have conducted, emission testing for the EAF baghouse (the EAF baghouse controls emissions from the 2 EAFs (P901 and P902) with 90% capture and 1 ladle metallurgical furnace (P903) with 100% capture and P901, P902, and P903 all vent to the EAF baghouse) in accordance with the following requirements:
- a. The emission testing shall be conducted within 6 months following permit issuance and on an annual basis thereafter unless the total facility-wide HAP potential to emit calculated using the methodology in Section A.3.d is less than 25 TPY for three consecutive emission tests, in which case this testing requirement shall not be required for the remaining term of the permit.
  - b. The emission testing shall be conducted to establish HAP metal stack emission rates for use in the potential to emit calculation in Section A.3.c.i.
  - c. The following test methods shall be employed to establish HAP metal stack emission rates for antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium: 40 CFR Part 60, Appendix A, Methods 1-4 and 29. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. The tests shall be conducted while emissions units P901, P902 and P903 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.
  - e. The permittee shall record the amount of manganese alloy added to P901, P902 and P903, in pounds, during the emission testing.
  - f. The permittee shall collect samples of the baghouse dust during the emission testing and analyze the dust for the percentage of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium. The results of the analysis shall be used in the potential to emit calculation in Section A.3.c.ii.
  - g. The permittee shall calculate the potential to emit using the methodology specified in Section A.3.d and submit the results of the potential to emit analysis, including all supporting test data, analyses and calculations, to the Ohio EPA, Central District Office along with the emission test report.

Not later than 30 days prior to the proposed test dates, 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 times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission tests.

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, 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.

5. Section D of the Background section of 40 CFR 63 Subpart EEEEE indicates that particulate emissions from electric arc furnaces may contain metal HAP such as lead or manganese and that effective control of particulate emissions will also result in effective control of HAP metals. The baghouse parametric monitoring specified in the terms and conditions for P901, P902, and P903 will serve to ensure ongoing compliance with the PE and Pb limitations and consequently will also serve to limit emissions of HAP metals.

**A. State and Federally Enforceable Section (continued)**

6. The permittee shall submit to the Ohio EPA, Central District Office, within 12 months following permit issuance, its "Melted Metals Scrap Specifications"\* plan that minimizes the use of scrap that contains mercury, lead, oils, plastics, and organic materials that are charged in the EAFs (P901 and P902). After submission of the plan to the Ohio EPA, the permittee shall thereafter implement the plan.

\* This scrap specification document is based on the Association of American Railroads (AAR) requirements and is designed to satisfy ISO 9000 certification.

7. The following insignificant emissions units are located at this facility:

F002 - sand silo & transfer #1 (PTI 01-333);  
F003 - sand silo & transfer #2 (PTI 01-333);  
F004 - sand silo & transfer #3 (PTI 01-333);  
G001 - diesel fuel tank (PTI 01-4361);  
L001 - cold cleaner #1 (PTI 01-4361); and  
L002 - cold cleaner #2 (PTI 01-4361).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, and well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

**B. State Only Enforceable Section**

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

B002 - tempering furnace;  
B003 - ladle preheat;  
B004 - mold preheat oven #1;  
B005 - mold preheat oven #2;  
B006 - mold preheat oven #3;  
B007 - mold holding oven #1;  
B008 - mold holding oven #2;  
B009 - mold holding oven #3;  
B010 - mold holding oven #4;  
B011 - makeup air heater #1;  
B013 - makeup air heater #2;  
B015 - makeup air heater #3;  
B017 - makeup air heater #4;  
B019 - makeup air heater #5;  
B021 - makeup air heater #6;  
B023 - makeup air heater #7;  
Z005 - tube preheat;  
Z011 - apex grinder;  
Z013 - wheel grinding;  
Z014 - final line grinding; and  
Z017 - riser knock out.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Normalizing Furnace (B001)  
**Activity Description:** NG furnace for heat treating wheels

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
46 MMBTU/hr natural gas/propane-fired normalizing furnace	OAC rule 3745-31-05(A)(3) (PTI 01-333)	There were no emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-18-06(E)(2)	None, exempt pursuant to OAC rule 3745-18-06(C).
	OAC rule 3745-17-11(B)(1)	None, see section A.I.2.b below.
	OAC rule 3745-17-07(A)	None, see section A.I.2.a below.

##### 2. Additional Terms and Conditions

- 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.
- 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.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

- 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.

##### IV. Reporting Requirements

- 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 30 days after the deviation occurs.

Facility Name: **Griffin Wheel Co. - Columbus Plant**  
Facility ID: **01-25-10-0987**  
Emissions Unit: **Normalizing Furnace (B001)**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Lime Storage (F001)  
**Activity Description:** Storage silo for pebble lime additive to EAFs

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
lime storage silo vented to bin vent filter	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.  See section A.1.2.a below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	Visible PE from the bin vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	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

- 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.

##### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping 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.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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.

### V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.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).

- 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-.9) (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.

### VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Roadways (F005)

**Activity Description:** Paved roadways, employee parking area, and unpaved roadways

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking area	OAC rule 3745-31-05(A)(3) (PTI 01-08242)	Particulate emissions (PE) from paved roadways and parking areas shall not exceed 12.4 tons/yr.  See section A.1.2.a below.  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.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.1.2.c and A.1.2.e through A.1.2.i below.)
unpaved roadway and loading area	OAC rule 3745-31-05(A)(3) (PTI 01-08242)	PE from the unpaved roadway shall not exceed 0.2 ton/yr.  See section A.1.2.b below.  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.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.1.2.d and A.1.2.e through A.1.2.i below.)
	OAC rule 3745-17-07(B)(4)	None, see section A.1.2.k below.
	OAC rule 3745-17-07(B)(5)	None, see section A.1.2.k below.
	OAC rule 3745-17-08(B)	None, see section A.1.2.l below.

## 2. Additional Terms and Conditions

- 2.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
- 2.b** The unpaved roadway (slag haul road to landfill) and loading area covered by this permit are subject to the above-mentioned requirements.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.j** The use of used oil as a dust suppressant is prohibited per OAC rule 3745-279-82.

**2. Additional Terms and Conditions (continued)**

- 2.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).
- 2.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.

**II. Operational Restrictions**

- 1. A maximum speed limit of 15 miles per hour for vehicular traffic shall be posted and enforced on the paved roadways and parking areas of this facility.

**III. Monitoring and/or Record Keeping 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:

paved roadways and parking area:            minimum inspection frequency:

entrance roadway	weekly
scrap, limestone and oxygen delivery	weekly
wheel shipment roadway	weekly
EAF baghouse access roadway	weekly
EAF slag removal area	daily, when in use
employee parking lot	weekly

unpaved roadway:                                    minimum inspection frequency:

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

The information required in 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.

#### IV. Reporting Requirements

1. In accordance with paragraph A.1.c.ii of the General Terms and Conditions the permittee shall submit quarterly deviation (excursion) reports for the following:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

#### V. Testing Requirements

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annual fugitive PE from paved roadways equals 12.4 tons/yr

## V. Testing Requirements (continued)

- 1.b** Emission Limitation:  
PE from unpaved roadways shall not exceed 0.2 ton/yr.

Applicable Compliance Method:

Compliance with the annual limitation for unpaved roadways may be demonstrated by calculating an AP-42 fugitive PE factor by multiplying a PM30 emission factor of 80 multiplied by the surface material silt content (12% - Griffin Wheel) divided by 12 multiplied by the mean vehicle speed (10 mph) divided by 30 multiplied by 18.4 tons (average vehicle weight) divided by 3 multiplied by the square root of 6 (wheels) divided by 4 multiplied by 365 minus 140 (precipitation days) divided by 365 days per year multiplied by 146 (vehicle miles travelled per year - VMT).

Emission factor - unpaved roadways AP-42 section 13.2.2

$$E = (k(1.7)(s/12)(S/30)(W/3)e^{0.7} (w/4)e^{0.5} (365-p/365))$$

k = base emission factor for particle size range = 80 (PM-30)

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

S = mean vehicle speed, mph = 10

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

w = mean number of wheels = 6

p = number of days with at least 0.01 in of precipitation per year = 140 days/yr

$$E = (0.8) * 5.9 * (6/12) * (10/30) * (18.4/3)e^{0.7} * (6/4)e^{0.5} * (365-140/365) = 2.11 \text{ lbs/VMT}$$

$$0.4 \text{ miles/EAF slag truck day} * 365 \text{ days/yr} = 146 \text{ miles/yr}$$

$$2.11 \text{ lb/VMT} * 146 \text{ miles/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 0.15 \text{ ton PM}$$

- 1.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.

- 1.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.

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Slag Handling (F006)

**Activity Description:** Slag handling with storage piles, screening, metals recovery and landfilling

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
slag landfilling and metal reclaim operations	OAC rule 3745-31-05(A)(3) (PTI 01-08357)	Fugitive particulate emissions (PE) from slag landfilling and metal reclaim operations shall not exceed 4.5 lbs/hr and 8.1 tons/yr.  See section A.1.2.a below.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.  See sections A.1.2.b through A.1.2.d below.  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.  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.
	OAC rule 3745-17-08(B)	None, see section A.1.2.e below.
	OAC rule 3745-17-07(B)	None, see section A.1.2.f below.

## 2. Additional Terms and Conditions

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

slag screening and metals recovery  
slag storage piles and  
landfilling operations

- 2.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:

material handling operation:	control measure(s):
slag screening and metals recovery	water spray on screen
slag storage piles	watering, as needed
landfilling operations	minimize drop height, watering

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

- 2.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.
- 2.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.
- 2.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.
- 2.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).

## II. 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.

## III. Monitoring and/or Record Keeping 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:

material handling operations:	minimum inspection frequency:
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.

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

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.

### IV. Reporting Requirements

1. In accordance with paragraph A.1.c. of the General Terms and Conditions the permittee shall submit quarterly deviation (excursion) reports for the following:
  - 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 performed as a result of an inspection, was not implemented.

### V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
  - 1.a Emission Limitation:  
PE of fugitive dust from slag landfilling and metal reclaim operations shall not exceed 4.5 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by summing emission calculations at 100 tons/hr (maximum weight slag reclaim) 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

1.26 ton PM/yr (landfill) + 3.19 ton PM/yr (erosion) \* 2,000 lb/ton \* 1yr/8,760 hr = 1.01 lbs/hr

(1.65 lb PM10/hr \* 2.1) + 1.01 lb/hr = 4.47 lbsPE /hr

## V. Testing Requirements (continued)

- 1.b** Emission Limitation:  
PE of fugitive dust shall not exceed 8.1 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 8.1 tons PE/yr.

- 1.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 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).

- 1.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 shall be demonstrated through VE observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22, and the procedures specified in OAC rule 3745-17-03(B)(4).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Scrap Bin (F007)  
**Activity Description:** Scrap bin with charge handling in melt shop

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
scrap bin with charge handling in melt shop (42 tons/hr)	OAC rule 3745-31-05(A)(3) (PTI 01-08367)	Particulate emissions (PE) from the melt shop roof monitor shall not exceed 4.58 lbs/hr and 20.1 tons/yr. PM10 emissions from the melt shop roof monitor shall not exceed 2.97 lbs/hr and 13 tons/yr.
		Best available technology measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
		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.
	OAC rule 3745-17-11(B)(1)	See section A.I.2.a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	None, see section A.I.2.b below.
	OAC rule 3745-17-07(B)(3)	None, see section A.I.2.c below.

## 2. Additional Terms and Conditions

- 2.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:

material handling operation:	control measure:
scrap and charge handling	building enclosure

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

- 2.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.
- 2.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).

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping 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:
- 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 abnormal emissions;
  - the total duration of any visible emission incident; and
  - 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.

## IV. Reporting Requirements

- 1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.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).

1.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).

1.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).

1.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.

1.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.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Coated Sand System (P001)

**Activity Description:** Coated sand system with 2.25 MMBTU/hr gas fired heater and sand resin mixer

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
sand coating system with 2.25 MMBTU/hr gas-fired heater and distribution cyclone vented to baghouse CE 13 and sand and resin mixer (uncontrolled)	OAC rule 3745-31-05(A)(3) (PTI 01-08346)	Particulate emissions (PE) in the stack gases from the baghouse shall not exceed 0.77 pound per hour and 3.4 tons per year.
		PM10 emissions in the stack gases from the baghouse shall not exceed 0.46 pound per hour and 2.0 tons per year.
		See section A.1.2.a below.
		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.
		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.
	OAC rule 3745-17-11(B)(1)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-08(B), 3745-23-06(B), and 3745-31-05(D). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	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.
	OAC rule 3745-31-05(C) (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.)
		See section A.II.1 below.
	OAC rule 3745-17-08(B)	See section A.I.2.c below.
	OAC rule 3745-17-07(B)	See section A.I.2.d below.
	OAC rule 3745-21-08(B)	See section A.I.2.e below.
	OAC rule 3745-23-06(B)	See section A.I.2.f below.

**2. Additional Terms and Conditions**

- 2.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 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 reporting requirements to ensure compliance with these limits.
- 2.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.
- 2.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.
- 2.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).
- 2.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.

- 2.f** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08346.
- 2.g** Because this emissions unit employs a solid phenolic resin flake, pursuant to paragraph (C)(3) of OAC rule 3745-21-01, the requirements of OAC rule 3745-21-07(G) do not apply to this emissions unit.

## II. Operational Restrictions

1. The maximum resin flake usage 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 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.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information, 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 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.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the phenolic resin usage limitations in A.II.1.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the emission limitation of 8.5 tons of OC per rolling, 12-month period.
3. The permittee shall submit quarterly deviation (excursion) reports for all exceedances during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.
4. The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
5. 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 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:  
PE in the stack gases from the baghouse shall not exceed 0.77 lb/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 6 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 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.

1.b Emission Limitation:  
PM10 emissions in the stack gases from the baghouse shall not exceed 0.46 lb/hr.

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.

1.c Emission Limitation:  
OC emissions in the stack gases from the sand and resin mixer shall not exceed 15.86 lbs/hr.

Applicable Compliance Method:

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).

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 following permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for OC.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for OC (phenol): 40 CFR Part 60, Appendix A, Methods 1-4 and 308.
- 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.

**V. Testing Requirements (continued)**

- 1.d** 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).

- 1.e** Emission Limitation:  
NO<sub>x</sub> emissions in the stack gases from the baghouse shall not exceed 0.20 lb/hr.

Applicable Compliance Method:

Compliance with the hourly allowable emission limitation may be demonstrated by multiplying 100 lbs NO<sub>x</sub>/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.

- 1.f** Emission Limitation:  
CO emissions in the stack gases from the baghouse shall not exceed 0.04 lb/hr.

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.

- 1.g** Emission Limitation:  
PE in the stack gases from the baghouse shall not exceed 3.4 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.

- 1.h** Emission Limitation:  
PM<sub>10</sub> emissions in the stack gases from the baghouse stack shall not exceed 2.0 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.

- 1.i** Emission Limitation:  
OC emissions in the stack gases from resin and sand mixer shall not exceed 8.5 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be based on the record keeping in section A.III.1.

## **V. Testing Requirements (continued)**

- 1.j** Emission Limitation:  
NOx emissions in the stack gases from the baghouse shall not exceed 0.88 ton/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.

- 1.k** Emission Limitation:  
CO emissions in the stack gases from the baghouse shall not exceed 0.18 ton/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.

- 2.** 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).

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(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.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
sand coating system with 2.25 MMBTU/hr gas-fired heater and distribution cyclone vented to baghouse CE 13 and sand and resin mixer (uncontrolled)		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Phenol  
 TLV (mg/m3): 19  
 Maximum Hourly Emission Rate (lbs/hr): 15.86  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 278  
 MAGLC (ug/m3): 452

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

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

2.
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Cope Cleaner (P002)  
**Activity Description:** Sand blast cleaning of copes

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
cope cleaner vented to baghouse 7	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.  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).
	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)	PE from the baghouse stack shall not exceed 5.2 lbs/hr based upon curve P-1 of Figure II.  See section A.1.2.b below.

##### 2. Additional Terms and Conditions

- 2.a The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.
- 2.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.

## **II. Operational Restrictions**

1. The pressure drop across baghouse 7 shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping 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 or eliminate the visible emissions.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above. The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

### 1.a Emission Limitation:

PE from the baghouse stack shall not exceed 0.01 gr/dscf of exhaust gases.

PE from the baghouse stack shall not exceed 5.2 lbs/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 12 months following permit issuance and 12 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. 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 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.

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).

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(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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Drag Cleaner (P003)  
**Activity Description:** Sand blast cleaning of drags

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
drag cleaner vented to baghouse 10	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.  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).
	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)	PE from the baghouse stack shall not exceed 5.2 lbs/hr based upon curve P-1 of Figure II.  See section A.1.2.b below.

##### 2. Additional Terms and Conditions

- 2.a The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.
- 2.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.

## II. Operational Restrictions

1. The pressure drop across baghouse 10 shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping 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.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above. The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

### 1.a Emission Limitation:

PE from the baghouse stack shall not exceed 0.01 gr/dscf of exhaust gases.

PE from the baghouse stack shall not exceed 5.2 lbs/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 12 months following permit issuance and 12 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. 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 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.

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).

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(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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hot Wheel Grinder #1 (P004)

**Activity Description:** Removal of riser stubs from wheels through abrasive grinding (HWG #1)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hot wheel grinder 1 vented to baghouse 17	OAC rule 3745-31-05(A)(3) (PTI 01-6399)	Particulate emissions (PE) from the baghouse stack shall not exceed 0.55 lb/hr and 2.4 tons/yr.  See section A.I.2.a below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	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 section A.I.2.b below.
	OAC rule 3745-17-08(B)	None, see section A.I.2.c below.

##### 2. Additional Terms and Conditions

- 2.a** The permittee shall maintain an enclosure around this 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.
- 2.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.
- 2.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.

## **II. Operational Restrictions**

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

## **III. Monitoring and/or Record Keeping 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.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:  
PE from the baghouse stack shall not exceed 0.55 lb/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 6 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. 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 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.

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).

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.

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.

**1.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).

**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.

Facility Name: **Griffin Wheel Co. - Columbus Plant**  
Facility ID: **01-25-10-0987**  
Emissions Unit: **Hot Wheel Grinder #1 (P004)**

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hot Wheel Grinder #2 (P005)

**Activity Description:** Removal of riser stubs from wheels through abrasive grinding (HWG #2)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hot wheel grinder 2 vented to baghouse 17	OAC rule 3745-31-05(A)(3) (PTI 01-6399)	Particulate emissions (PE) from the baghouse stack shall not exceed 0.55 lb/hr and 2.4 tons/yr.  See section A.I.2.a below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	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 section A.I.2.b below.
	OAC rule 3745-17-08(B)	None, see section A.I.2.c below.

##### 2. Additional Terms and Conditions

- The permittee shall maintain an enclosure around this 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.
- 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.
- 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.

## **II. Operational Restrictions**

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

## **III. Monitoring and/or Record Keeping 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.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:  
PE from the baghouse stack shall not exceed 0.55 lb/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 6 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. 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 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.

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).

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.

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.

**1.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).

**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.

Facility Name: **Griffin Wheel Co. - Columbus Plant**  
Facility ID: **01-25-10-0987**  
Emissions Unit: **Hot Wheel Grinder #2 (P005)**

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hot Wheel Grinder #3 (P006)

**Activity Description:** Removal of riser stubs from wheels through abrasive grinding (HWG #3)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hot wheel grinder 3 vented to baghouse 17	OAC rule 3745-31-05(A)(3) (PTI 01-6399)	Particulate emissions (PE) from the baghouse stack shall not exceed 0.55 lb/hr and 2.4 tons/yr.  See section A.I.2.a below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	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 section A.I.2.b below.
	OAC rule 3745-17-08(B)	None, see section A.I.2.c below.

##### 2. Additional Terms and Conditions

- 2.a** The permittee shall maintain an enclosure around this 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.
- 2.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.
- 2.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.

## II. Operational Restrictions

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

## III. Monitoring and/or Record Keeping 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.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:  
PE from the baghouse stack shall not exceed 0.55 lb/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 6 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. 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 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.

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).

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.

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.

**1.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).

**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.

Facility Name: **Griffin Wheel Co. - Columbus Plant**  
Facility ID: **01-25-10-0987**  
Emissions Unit: **Hot Wheel Grinder #3 (P006)**

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hubcutter #1 (P007)  
**Activity Description:** Hubcutter No. 1 w/ Baghouse

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hubcutter 1 vented to baghouse 4	OAC rule 3745-31-05(A)(3) (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.  See section A.I.2.a below.  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).
	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)	PE from the baghouse stack shall not exceed 10.56 lbs/hr based upon curve P-1 of Figure II.
	OAC rule 3745-17-07(B)	None, see section A.I.2.b below.
	OAC rule 3745-17-08(B)	None, see section A.I.2.c below.

##### 2. Additional Terms and Conditions

- 2.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.
- 2.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.
- 2.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.

## **2. Additional Terms and Conditions (continued)**

- 2.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.

## **II. 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.

## **III. Monitoring and/or Record Keeping 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.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

### 1.a Emission Limitations:

PE from the baghouse stack shall not exceed 0.01 gr/dscf of exhaust gases.

PE from the baghouse stack shall not exceed 10.56 lbs/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 6 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 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.

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).

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.

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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hubcutter #2 (P008)  
**Activity Description:** Hubcutter No. 2 w/ Baghouse

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hubcutter 2 vented to baghouse 4	OAC rule 3745-31-05(A)(3) (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.  See section A.I.2.a below.  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).
	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)	PE from the baghouse stack shall not exceed 10.56 lbs/hr based upon curve P-1 of Figure II.
	OAC rule 3745-17-07(B)	None, see section A.I.2.b below.
	OAC rule 3745-17-08(B)	None, see section A.I.2.c below.

##### 2. Additional Terms and Conditions

- 2.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.
- 2.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.
- 2.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.

## **2. Additional Terms and Conditions (continued)**

- 2.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.

## **II. 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.

## **III. Monitoring and/or Record Keeping 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.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

### 1.a Emission Limitations:

PE from the baghouse stack shall not exceed 0.01 gr/dscf of exhaust gases.

PE from the baghouse stack shall not exceed 10.56 lbs/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 6 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 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.

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).

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.

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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hubcutter #3 (P009)  
**Activity Description:** Hubcutter No. 3 w/ Baghouse

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hubcutter 3 vented to baghouse 4	OAC rule 3745-31-05(A)(3) (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.  See section A.I.2.a below.  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).
	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)	PE from the baghouse stack shall not exceed 10.56 lbs/hr based upon curve P-1 of Figure II.
	OAC rule 3745-17-07(B)	None, see section A.I.2.b below.
	OAC rule 3745-17-08(B)	None, see section A.I.2.c below.

##### 2. Additional Terms and Conditions

- 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.
- 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.
- 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.

## **2. Additional Terms and Conditions (continued)**

- 2.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.

## **II. 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.

## **III. Monitoring and/or Record Keeping 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.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedences during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

## **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

### 1.a Emission Limitations:

PE from the baghouse stack shall not exceed 0.01 gr/dscf of exhaust gases.

PE from the baghouse stack shall not exceed 10.56 lbs/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 6 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 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.

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).

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.

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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Cope Spray (P010)  
**Activity Description:** Spray coating (non-VOC) of copes

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
spray coating of cope mold with water and silica mixture vented to spray booth exhaust filter CE8	OAC rule 3745-31-05(A)(3) (PTI 01-08678)	Particulate emissions (PE) from the spray booth exhaust filter stack shall not exceed 2.6 lbs/hr and 11.5 tons/yr.  PM10 emissions from the spray booth exhaust filter stack shall not exceed 1.6 lbs/hr and 6.8 tons/yr.  See sections A.1.2.a and A.1.2.b below.  Visible emissions from the spray booth exhaust filter stack shall not exceed 10% opacity, as a 6-minute average.
	OAC rule 3745-17-07(A)	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).
	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

- 2.a The spray booth shall be operated and maintained in accordance with the manufacturer's recommendations. Spray booth exhaust filters shall be maintained per manufacturer's recommendations in order to maintain the highest effective level of PE control.
- 2.b The permittee shall operate and vent all emissions to the spray booth exhaust filter whenever this emissions unit is in operation.

## II. Operational Restrictions

1. The pressure drop across the spray booth exhaust filter shall be maintained within the manufacturer's recommended range of no less than 0.25 and not greater than 3 inches of water column, while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the spray booth exhaust filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record:
  - a. the pressure drop across the exhaust filter 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 daily 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.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedances during which the pressure drop across the exhaust filter did not comply with the allowable range specified in A.II.1. above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the spray booth exhaust filter was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 30 days after the event occurs.
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 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## **V. Testing Requirements (continued)**

### **1.a Emission Limitations:**

PE from the 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 lb PE exhaust/lb overspray.

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.

### **1.b Emission Limitations:**

PM10 from the 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 and by 0.15 lb PE/lb overspray.

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.

### **1.c Emission Limitations:**

Visible emissions from the 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).

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Drag Spray (P011)  
**Activity Description:** Spray coating (non-VOC) of drags

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
spray coating of drag with water and silica mixture vented to spray booth exhaust filter CE11	OAC rule 3745-31-05(A)(3) (PTI 01-08678)	Particulate emissions (PE) from the spray booth exhaust filter stack shall not exceed 2.6 lbs/hr and 11.5 tons/yr.  PM10 emissions from the spray booth exhaust filter stack shall not exceed 1.6 lbs/hr and 6.8 tons/yr.  See sections A.1.2.a and A.1.2.b below.  Visible emissions from the spray booth exhaust filter stack shall not exceed 10% opacity, as a 6-minute average.
	OAC rule 3745-17-07(A)	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).
	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

- 2.a The spray booth shall be operated and maintained in accordance with the manufacturer's recommendations. Spray booth exhaust filters shall be maintained per manufacturer's recommendations in order to maintain the highest effective level of PE control.
- 2.b The permittee shall operate and vent all emissions to the spray booth exhaust filter whenever this emissions unit is in operation.

## II. Operational Restrictions

1. The pressure drop across the spray booth exhaust filter shall be maintained within the manufacturer's recommended range of no less than 0.25 and not greater than 3 inches of water column, while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the spray booth exhaust filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record:
  - a. the pressure drop across the exhaust filter 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 daily 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.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedances during which the pressure drop across the exhaust filter did not comply with the allowable range specified in A.II.1. above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the spray booth exhaust filter was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 30 days after the event occurs.
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 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 1.a Emission Limitations:

PE from the 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 lb PE exhaust/lb overspray.

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.

### 1.b Emission Limitations:

PM10 from the 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 and by 0.15 lb PE/lb overspray.

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.

### 1.c Emission Limitations:

Visible emissions from the 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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mold Machining #1 (P012)  
**Activity Description:** Mold Machining Mill (GM-1)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mold machining 1 vented to baghouse 15	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.  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).
	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)	PE from the baghouse stack shall not exceed 50 lbs/hr based upon curve P-1 of Figure II.  See section A.1.2.b below.

##### 2. Additional Terms and Conditions

- 2.a The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.
- 2.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.

##### II. 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.

### **III. Monitoring and/or Record Keeping 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 1.a Emission Limitations:

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 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 12 months following permit issuance and 12 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 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.

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.

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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mold Machining #2 (P013)  
**Activity Description:** Mold Machining Mill (GM-2)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mold machining 2 vented to baghouse 15	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.
	OAC rule 3745-17-07(A)	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).  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)	PE from the baghouse stack shall not exceed 50 lbs/hr based upon curve P-1 of Figure II.  See section A.1.2.b below.

##### 2. Additional Terms and Conditions

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

##### II. Operational Restrictions

- 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.

### **III. Monitoring and/or Record Keeping 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## **V. Testing Requirements (continued)**

### **1.a Emission Limitations:**

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 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 12 months following permit issuance and 12 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 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.

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.

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.

### **1.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).

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mold Machining #4 (P015)  
**Activity Description:** Radial Drill (GM-4)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mold machining 4 vented to baghouse 15	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.
	OAC rule 3745-17-07(A)	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).  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)	PE from the baghouse stack shall not exceed 50 lbs/hr based upon curve P-1 of Figure II.  See section A.1.2.b below.

##### 2. Additional Terms and Conditions

- 2.a** The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.
- 2.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.

##### II. Operational Restrictions

- 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.

### **III. Monitoring and/or Record Keeping 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 1.a Emission Limitations:

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 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 12 months following permit issuance and 12 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 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.

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.

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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingate Lathe (P016)  
**Activity Description:** Lathe for milling ingates

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ingate lathe vented to baghouse 15	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.
	OAC rule 3745-17-07(A)	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).  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)	PE from the baghouse stack shall not exceed 50 lbs/hr based upon curve P-1 of Figure II.  See section A.1.2.b below.

##### 2. Additional Terms and Conditions

- 2.a The permittee shall operate the baghouse and vent all emissions to the baghouse whenever this emissions unit is in operation.
- 2.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.

##### II. 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.

### **III. Monitoring and/or Record Keeping 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## **V. Testing Requirements (continued)**

### **1.a Emission Limitations:**

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 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 12 months following permit issuance and 12 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 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.

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.

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.

### **1.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).

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Cleaner (Shot Blast) (P017)

**Activity Description:** Wheel Cleaner (WC-1)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
wheel cleaner vented to baghouse 5	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.  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).
	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).

##### 2. Additional Terms and Conditions

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

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 to 10 inches of water while the emissions unit is in operation.

### **III. Monitoring and/or Record Keeping 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 1.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.

#### 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 6 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 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 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.

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.

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.

### 1.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).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Peener (Shot Blast) (P018)

**Activity Description:** Wheel Peening (WP-1)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
wheel peener vented to baghouse 5	OAC rule 3745-31-05(A)(3) (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.  See section A.1.2.a below.  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).
	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).

##### 2. Additional Terms and Conditions

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

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 to 10 inches of water while the emissions unit is in operation.

### **III. Monitoring and/or Record Keeping 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## **V. Testing Requirements (continued)**

### **1.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.

#### **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 6 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 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 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.

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.

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.

### **1.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).

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** East King Mill (P019)  
**Activity Description:** Mold Machining Mill (King Mill) (GM-6)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mold machining mill (King Mill) vented to baghouse 14	OAC rule 3745-31-05(A)(3) (PTI 01-1742)	Particulate emissions (PE) from the baghouse stack shall not exceed 1.0 lb/hr and 4.3 tons/yr.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of 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).

##### 2. Additional Terms and Conditions

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

##### II. 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.

### III. Monitoring and/or Record Keeping 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. 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 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:
  - 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 visible emissions;
  - d. the total duration of any visible emission incident; and
  - e. 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 very infrequently (approximately 500 hours per year); therefore, a monthly visible emissions check is deemed to be reasonable for this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

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 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.

### V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.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.

**V. Testing Requirements (continued)**

**1.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).

**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.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Core Baking Station (P020)  
**Activity Description:** Electric core baking station in graphite cope

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
electric core baking station for graphite cope	OAC rule 3745-31-05(A)(3) (PTI 01-08340)	Fugitive particulate emissions (PE) shall not exceed 0.99 lb/hr and 4.3 tons/yr.  Fugitive PM10 emissions shall not exceed 0.83 lb/hr and 3.6 tons/yr.  OC emissions shall not exceed 0.34 lb/hr and 1.49 tons/yr.
	OAC rule 3745-17-07(B)	See sections A.I.2.a and A.II.1 below. See section A.I.2.b below.
	OAC rule 3745-17-08(B)	See section A.I.2.c below.

##### 2. Additional Terms and Conditions

- 2.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 for PTI purposes 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.
- 2.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.
- 2.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.
- 2.d Because this emissions unit employs a solid phenolic resin flake, pursuant to paragraph (C)(3) of OAC rule 3745-21-01, the requirements of OAC rule 3745-21-07(G) do not apply to this emissions unit.

##### II. Operational Restrictions

1. The permittee shall employ only electric heat as a heat source in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records for each day during which a heat source other than electric heat was employed in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a heat source other than electric heat is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

### V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:  
Fugitive PE shall not exceed 0.99 lb/hr.

Applicable Compliance Method:

Compliance with the hourly fugitive PE limitation may be demonstrated by multiplying 1.54 tons sand/hr (maximum process weight rate) by 0.65 lb PE/ton (SCC code 3-04-007-06 emission factor for steel foundry sand handling).

- 1.b Emission Limitation:  
Fugitive PM10 emissions shall not exceed 0.83 lb/hr.

Applicable Compliance Method:

Compliance with the hourly fugitive PM10 limitation may be demonstrated by multiplying 1.54 tons sand/hr (maximum process weight rate) by 0.54 lb PM10/ton (SCC code 3-04-007-06 emission factor for steel foundry sand handling).

- 1.c Emission Limitation:  
OC emissions shall not exceed 0.34 lb/hr.

Applicable Compliance Method:

Compliance with the hourly OC (HAP) emission limitation may be demonstrated by multiplying the maximum process weight rate of 1.54 tons sand baked/hr by 0.22 lb OC/ton sand and adding the maximum process weight rate of 1.54 tons sand baked/hr multiplied by 0.002 lb formaldehyde/ton sand (emission factors are from Borden correspondence dated 11/3/95).

- 1.d Emission Limitation:  
Fugitive PE 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.

- 1.e Emission Limitation:  
OC emissions shall not exceed 1.49 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.

Facility Name: **Griffin Wheel Co. - Columbus Plant**

Facility ID: **01-25-10-0987**

Emissions Unit: **Core Baking Station (P020)**

## **V. Testing Requirements (continued)**

- 1.f** Emission Limitation:  
Fugitive PM10 emissions shall not exceed 3.6 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.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
electric core baking station in graphite cope		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

- See section B.III.1 under emission unit P001 (Coated Sand System) for actual ground level concentration of phenol emissions from both emissions units P001 and P020. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Pressure Pouring Station (P021)

**Activity Description:** Pressure pouring station

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
pressure pouring station with pressure release vent (42 tons/hr)	OAC rule 3745-31-05(A)(3) (PTI 01-08239)	Particulate emissions (PE) from the pressure release vent stack shall not exceed 4.2 lbs/hr and 18.4 tons/yr.
		PM10 emissions from the pressure release vent stack shall not exceed 2.1 lbs/hr and 9.2 tons/yr.
		NOx emissions from the pressure release vent stack shall not exceed 0.4 lb/hr and 1.8 tons/yr.
		OC emissions from the pressure release vent stack shall not exceed 0.6 lb/hr and 2.6 tons/yr.
		SO2 emissions from the pressure release vent stack shall not exceed 0.8 lb/hr and 3.7 tons/yr.
		See section A.1.2.a below.
	OAC rule 3745-17-11(B)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	Visible PE from the pressure relief vent stack shall not exceed 20% opacity, as a 6-minute average.
		See section A.1.2.b below.

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

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-17-07(B)

See section A.I.2.c below.

**2. Additional Terms and Conditions**

- 2.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 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.
- 2.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.
- 2.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.

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

- 1.** 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 A.V.2); therefore, a monthly visible check is deemed to be reasonable for this emissions unit.

**IV. Reporting Requirements**

- 1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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.

**V. Testing Requirements**

- 1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

- 1.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.

- 1.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 0.55 (assumed 55 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.

- 1.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.

## V. Testing Requirements (continued)

- 1.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 0.9 (adjusted for enclosed pressure pour in graphite mold).

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.

- 1.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.

- 1.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.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Chamfer Grinder (P022)

**Activity Description:** Chamfer grinder vented to baghouse with peener and cleaner shot blast

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
chamfer grinder vented to baghouse 5	OAC rule 3745-31-05(A)(3) (PTI 01-08240)	Particulate emissions (PE) from the baghouse stack shall not exceed 0.77 pound per hour and 3.4 tons per year.  See section A.1.2.a below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	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).

##### 2. Additional Terms and Conditions

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

##### II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 4 to 10 inches of water while the emissions unit is in operation.

### **III. Monitoring and/or Record Keeping 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. 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.
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.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all periods during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

**1.a** Emission Limitation:  
PE from the baghouse stack shall not exceed 0.77 lb/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 6 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 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 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.

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).

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.

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.

**1.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).

**1.d** Emission Limitation:  
PE from the baghouse stack shall not exceed 3.4 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.

Facility Name: **Griffin Wheel Co. - Columbus Plant**  
Facility ID: **01-25-10-0987**  
Emissions Unit: **Chamfer Grinder (P022)**

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Electric Arc Furnace #1 (P901)  
**Activity Description:** Furnace for melting scrap steel into molten steel

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
electric arc furnace #1 vented to baghouse 1 (19.5 tons/hr)	OAC rule 3745-31-05(A)(3) (PTI 01-7377)	PM10 emissions from the baghouse stack shall not exceed 8.7 lbs/hr and 38.0 tons/yr.
		See section A.1.2.a below.
		Fugitive PM10 emissions shall not exceed 40.5 tons/yr.
		Organic compound (OC) emissions from the baghouse stack shall not exceed 4.1 lbs/hr and 18.0 tons/yr.
		Nitrogen oxides (NOx) emissions from the baghouse stack shall not exceed 2.9 lbs/hr and 12.8 tons/yr.
		Carbon monoxide (CO) emissions from the baghouse stack shall not exceed 59.5 lbs/hr and 261 tons/yr.
		Sulfur dioxide (SO2) emissions from the baghouse stack shall not exceed 1.4 lbs/hr and 6.1 tons/yr.
		Lead (Pb) emissions from the baghouse stack shall not exceed 0.05 pound per hour and 0.21 ton/yr.
		Fugitive Pb emissions shall not exceed 0.22 ton/yr.
		Visible PE from the electric arc furnace shop roof monitors shall not exceed 20% opacity as a 6-minute average.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	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(A)	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).
	OAC rule 3745-17-07(B)	See section A.I.2.c below.
	OAC rule 3745-17-08(B)	See section A.I.2.d below.

**2. Additional Terms and Conditions**

- 2.a** There shall be no visible PE from the baghouse stack during operation of this emissions unit.
- 2.b** The permittee shall operate the baghouse whenever this emissions unit is in operation.
- 2.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.
- 2.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.

**II. Operational Restrictions**

- 1. The pressure drop across baghouse 1 shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.

**III. Monitoring and/or Record Keeping 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. 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.

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

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 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, etc...).
  - 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 permittee shall maintain records of the annual operating hours for this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedances during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.1.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the electric arc furnace shop roof monitors 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 Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack of 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitations:

PM10 from the baghouse stack shall not exceed 8.7 lbs/hr;  
OC emissions from the baghouse stack shall not exceed 4.1 lbs/hr;  
NOx emissions from the baghouse stack shall not exceed 2.9 lbs/hr;  
CO emissions from the baghouse stack shall not exceed 59.5 lbs/hr;  
SO2 emissions from the baghouse stack shall not exceed 1.4 lbs/hr; and  
Pb emissions from the baghouse stack shall not exceed 0.05 lb/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 6 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 rates for PM10, OC, NOx, CO, SO2, and Pb stack emissions and annual fugitive Pb emissions in section A.V.1.c.
- iii. 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 201A for PM10, Method 25 for OC, Method 7E for NOx, Method 10 for CO, Method 6C for SO2, and Method 12 for Pb emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. In addition, during each test run, visible emission readings shall be performed for the baghouse stack in accordance with 40 CFR Part 60, Appendix A, Method 22 and for the roof monitor in accordance with 40 CFR Part 60, Appendix A, Method 9.
- iv. The tests shall be conducted while emissions units P901, P902 and P903 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test dates, 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 times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission tests.

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, 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.

## V. Testing Requirements (continued)

- 1.b** Emission Limitations:  
PE from the baghouse stack shall not exceed 38.0 tons PM10/yr;  
Fugitive PE shall not exceed 40.5 tons PM10/yr;  
OC from the baghouse stack shall not exceed 18.0 tons/yr;  
NOx from the baghouse stack shall not exceed 12.8 tons/yr;  
CO from the baghouse stack shall not exceed 261 tons/yr;  
SO2 from the baghouse stack shall not exceed 6.1 tons/yr; and  
Pb emissions from the baghouse stack shall not exceed 0.21 ton/yr.

Applicable Compliance Method:

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

- 1.c** Emission Limitation:  
Fugitive Pb emissions shall not exceed 0.22 ton/yr.

Applicable Compliance Method:

This emission limitation was established using an emission factor of 0.0055 lb Pb/lb PM10\* multiplied by 40.5 tons PM10/yr (fugitive emission limitation for PM10).

\*emission factor established using stack test data from the Griffin Wheel facility in Bessemer, Alabama

Annual fugitive Pb emissions shall be calculated using the PM10 and Pb hourly emission rates from the stack testing required under Section A.V.1.a in the equation below (based on sections D.1.a and D.1.f of the Additional Special Terms and Conditions of PTI 01-7377):

$$\text{tons/yr fugitive Pb emissions} = \left( \frac{[(\text{lbs/hr PM10}) \times (\text{operating hours/yr}) \times (\text{ton}/2000 \text{ lbs})]}{(1-0.95^{**})} \right) \times 1/0.935^{***} \times (1-0.935^{***}) \times (\text{lbs/hr Pb})/(\text{lbs/hr PM10})$$

\*\* EAF baghouse control efficiency for PM10 fraction estimated by Griffin Wheel in 1997

\*\*\* EAF side draft hood capture efficiency estimated by Griffin Wheel in 1997

- 2.** Emission Limitation:  
Visible PE from the electric arc furnace shop roof monitors shall not exceed 20% opacity, as a 6-minute average, during any 60 minute observation period.

Applicable Compliance Limitation:

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).

- 3.** Emission Limitation:  
There shall be no visible PE from the baghouse stack during operation of this emissions unit.

Applicable Compliance method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Electric Arc Furnace #2 (P902)  
**Activity Description:** Furnace for melting scrap steel into molten steel

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
electric arc furnace #2 vented to baghouse 1 (19.5 tons/hr)	OAC rule 3745-31-05(A)(3) (PTI 01-7377)	PM10 emissions from the baghouse stack shall not exceed 8.7 lbs/hr and 38.0 tons/yr.
		See section A.1.2.a below.
		Fugitive PM10 emissions shall not exceed 40.5 tons/yr.
		Organic compound (OC) emissions from the baghouse stack shall not exceed 4.1 lbs/hr and 18.0 tons/yr.
		Nitrogen oxides (NOx) emissions from the baghouse stack shall not exceed 2.9 lbs/hr and 12.8 tons/yr.
		Carbon monoxide (CO) emissions from the baghouse stack shall not exceed 59.5 lbs/hr and 261 tons/yr.
		Sulfur dioxide (SO2) emissions from the baghouse stack shall not exceed 1.4 lbs/hr and 6.1 tons/yr.
		Lead (Pb) emissions from the baghouse stack shall not exceed 0.05 pound per hour and 0.21 ton/yr.
		Fugitive Pb emissions shall not exceed 0.22 ton/yr.
		Visible PE from the electric arc furnace shop roof monitors shall not exceed 20% opacity as a 6-minute average.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	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(A)	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).
	OAC rule 3745-17-07(B)	See section A.1.2.c below.
	OAC rule 3745-17-08(B)	See section A.1.2.d below.

**2. Additional Terms and Conditions**

- 2.a** There shall be no visible PE from the baghouse stack during operation of this emissions unit.
- 2.b** The permittee shall operate the baghouse whenever this emissions unit is in operation.
- 2.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.
- 2.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.

**II. Operational Restrictions**

- 1. The pressure drop across baghouse 1 shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.

**III. Monitoring and/or Record Keeping 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. 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.

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

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 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, etc...).
  - 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 permittee shall maintain records of the annual operating hours for this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedances during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.1.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the electric arc furnace shop roof monitors 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 Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack of 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.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitations:

PM10 from the baghouse stack shall not exceed 8.7 lbs/hr;  
OC emissions from the baghouse stack shall not exceed 4.1 lbs/hr;  
NOx emissions from the baghouse stack shall not exceed 2.9 lbs/hr;  
CO emissions from the baghouse stack shall not exceed 59.5 lbs/hr;  
SO2 emissions from the baghouse stack shall not exceed 1.4 lbs/hr; and  
Pb emissions from the baghouse stack shall not exceed 0.05 lb/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 6 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 rates for PM10, OC, NOx, CO, SO2, and Pb stack emissions and annual fugitive Pb emissions in section A.V.1.c.
- iii. 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 201A for PM10, Method 25 for OC, Method 7E for NOx, Method 10 for CO, Method 6C for SO2, and Method 12 for Pb emissions. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. In addition, during each test run, visible emission readings shall be performed for the baghouse stack in accordance with 40 CFR Part 60, Appendix A, Method 22 and for the roof monitor in accordance with 40 CFR Part 60, Appendix A, Method 9.
- iv. The tests shall be conducted while emissions units P901, P902 and P903 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test dates, 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 times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission tests.

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, 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.

## V. Testing Requirements (continued)

- 1.b** Emission Limitations:  
PE from the baghouse stack shall not exceed 38.0 tons PM10/yr;  
Fugitive PE shall not exceed 40.5 tons PM10/yr;  
OC from the baghouse stack shall not exceed 18.0 tons/yr;  
NOx from the baghouse stack shall not exceed 12.8 tons/yr;  
CO from the baghouse stack shall not exceed 261 tons/yr;  
SO2 from the baghouse stack shall not exceed 6.1 tons/yr; and  
Pb emissions from the baghouse stack shall not exceed 0.21 ton/yr.

Applicable Compliance Method:

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

- 1.c** Emission Limitation:  
Fugitive Pb emissions shall not exceed 0.22 ton/yr.

Applicable Compliance Method:

This emission limitation was established using an emission factor of 0.0055 lb Pb/lb PM10\* multiplied by 40.5 tons PM10/yr (fugitive emission limitation for PM10).

\*emission factor established using stack test data from the Griffin Wheel facility in Bessemer, Alabama

Annual fugitive Pb emissions shall be calculated using the PM10 and Pb hourly emission rates from the stack testing required under Section A.V.1.a in the equation below (based on sections D.1.a and D.1.f of the Additional Special Terms and Conditions of PTI 01-7377):

$$\text{tons/yr fugitive Pb emissions} = \left( \frac{[(\text{lbs/hr PM10}) \times (\text{operating hours/yr}) \times (\text{ton}/2000 \text{ lbs})]}{(1-0.95^{**})} \right) \times \frac{1}{0.935^{***}} \times (1 - 0.935^{***}) \times (\text{lbs/hr Pb})/(\text{lbs/hr PM10})$$

\*\* EAF baghouse control efficiency for PM10 fraction estimated by Griffin Wheel in 1997

\*\*\* EAF side draft hood capture efficiency estimated by Griffin Wheel in 1997

- 2.** Emission Limitation:  
Visible PE from the electric arc furnace shop roof monitors shall not exceed 20% opacity, as a 6-minute average, during any 60 minute observation period.

Applicable Compliance Limitation:

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).

- 3.** Emission Limitation:  
There shall be no visible PE from the baghouse stack during operation of this emissions unit.

Applicable Compliance method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ladle Metallurgy Furnace (P903)  
**Activity Description:** Furnace for refining molten steel in ladle

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ladle metallurgical furnace vented to baghouse 1 (39 tons/hr)	OAC rule 3745-31-05(A)(3) (PTI 01-7377)	PM10 from the baghouse stack shall not exceed 1.9 lbs/hr and 8.5 tons/yr.  Nitrogen oxides (NOx) emissions from the baghouse stack shall not exceed 5.9 lbs/hr and 25.6 tons/yr.  Carbon monoxide (CO) emissions from the baghouse stack shall not exceed 19.5 lbs/hr and 85 tons/yr.  Sulfur dioxide (SO2) emissions from the baghouse stack shall not exceed 2.7 lbs/hr and 11.8 tons/yr.
	OAC rule 3745-17-11(B)(1)	See sections A.1.2.b and A.1.2.c below.  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(A)	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).

##### 2. Additional Terms and Conditions

- 2.a The permittee shall operate the baghouse and vent all of the particulate emissions to the baghouse whenever this emissions unit is in operation.
- 2.b There shall be no visible PE from the baghouse stack during operation of this emissions unit.

## **2. Additional Terms and Conditions (continued)**

**2.c** There shall be no visible fugitive PE from this emissions unit.

## **II. Operational Restrictions**

1. The pressure drop across baghouse 1 shall be maintained within the range of 3 to 10 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping 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. 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 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.
3. 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 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.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports for all exceedances during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 above.

The quarterly deviation (excursion) reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions.

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

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitations:

PE from the baghouse stack shall not exceed 1.9 lbs PM10/hr;  
NOx emissions from the baghouse stack shall not exceed 5.9 lbs/hr;  
CO emissions from the baghouse stack shall not exceed 19.5 lbs/hr; and  
SO2 emissions from the baghouse stack shall not exceed 2.7 lbs/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 6 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 rates for PM10, NOx, CO and SO2 stack emissions.
- iii. 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 201A for PM10, Method 7E for NOx, Method 10 for CO, and Method 6C for SO2. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. In addition, during each test run, visible emission readings shall be performed for the baghouse stack in accordance with 40 CFR Part 60, Appendix A, Method 22 and visible emission readings shall be performed for fugitive particulate emissions from this emissions unit in accordance with 40 CFR Part 60, Appendix A, Method 22.
- iv. The tests shall be conducted while emissions units P901, P902 and P903 are operating at or near maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test dates, 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 times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission tests.

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, 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.

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitations:  
PM10 from the baghouse stack shall not exceed 8.5 tons PM10 per year;  
NOx emissions from the baghouse stack shall not exceed 25.6 tons/yr;  
CO emissions from the baghouse stack shall not exceed 85 tons/yr; and  
SO2 emissions from the baghouse stack shall not exceed 11.8 tons/yr.

Applicable Compliance Method:

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

- 2.** Emission Limitation:  
There shall be no visible PE from the baghouse stack during operation of this emissions unit.

Applicable Compliance method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

- 3.** Emission Limitation:  
There shall be no visible fugitive PE from this emissions unit.

Applicable Compliance method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

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

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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