



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

11/27/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

07-73-01-0001

OSCO Industries - Portsmouth Division
HARRY E GULLEY
JCT.RT. 23 SOUTH & RT. 52 EAST/WEST
P.O. BOX 1388
PORTSMOUTH, OH 45662-1388

Dear HARRY E GULLEY:

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

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Portsmouth Air Pollution Group.

Very truly yours,

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

cc: Portsmouth Air Pollution Group
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 11/27/02	Effective Date: 12/18/02	Expiration Date: 11/27/07
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This document constitutes issuance of a Title V permit for Facility ID: 07-73-01-0001 to:
 OSCO Industries - Portsmouth Division
 JCT.RT. 23 SOUTH & RT. 52 EAST/WEST
 P.O. BOX 1388
 PORTSMOUTH, OH 45662-1388

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

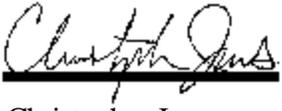
B003 (Annealing Furnace) Gas fired Heat Treat Furnace For Softening Castings to Increase Machinability	Maintained Molten Iron for Transfer for Pouring.	Shotblaster, Casting Cleaning
F001 (DISA #1 MOLDING, POURING, COOLING, AND SHAKEOUT SYSTEM) MOLD MAKING, POURING, COOLING, AND SHAKEOUT SYSTEM	F008 (Charge Handling) Transferring, Weighing, and Charging of Materials	P018 (WHEELABRATOR #6) 34" cubic foot Shot Blaster used for cleaning the castings
F002 (Osborn Molding, Pouring, Cooling, and Shakout System) Mold Making, Pouring, Cooling, and Shakeout System	P002 (West Cooling Drum) Continuous Rotary Cooling Drum	P019 (West Sand System) Prepared Molding Sand
F003 (East Line Molding, Pouring, Cooling, and Shakeout) Mold Making, Pouring, Cooling, and Shakeout System	P005 (East Cooling Drum) Continuous Rotary Cooling Drum	P020 (East Sand System) Prepared Molding Sand
F004 (Stand Grinders) Stand Grinders, Rough Ground Castings	P013 (Disa #2 Molding, Pouring, Cooling, and Shakeout System) Mold Making, Pouring, Cooling, and Shakeout System	P021 (Wheelabrator #1) New 34 cu.ft. Shotblaster #1 replaced the old 28 cu.ft. #1
F007 (Electric HoldingFurnace) Holding Furnace, Temperature and Chemistry	P014 (Wheelabrator #5) Shotblaster, Casting Cleaning	P906 (WEST CUPOLA) Cupola; melting of metallic materials to form molten gray iron castings
	P015 (Wheelabrator #2) Shotblaster, Casting Cleaning	P907 (East Cupola) Cupola; melting of metallic materials to form molten iron for making gray iron castings
	P016 (Wheelabrator #4)	

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:

Portsmouth Air Pollution Group
 605 Washington Street, Third Floor
 Portsmouth, OH 45662
 (740) 353-5156

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", is written over a solid black horizontal line.

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, 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. 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))
 - ii. **For emission limitations, operational restrictions, and control device operating parameter limitations:**
 - (a) Written reports of (i) any deviations from federally enforceable 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 taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written 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. 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. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

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

- (b) 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 deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement 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. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

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

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and

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

2. 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 unit(s) 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 OAC rule 3745-15-06, 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).

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

3. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a 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, except that no such notice shall be required for changes that qualify as

insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)
(*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))

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 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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. The permittee will be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron Foundries, 40 CFR Part 63, Subpart EEEEE and Industrial, Commercial, and Institutional Boilers 40 CFR Part 63, Subpart DDDDD. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
2. If the final MACT standard is not promulgated by May 15, 2004, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted no later than May 15, 2004 [this date may be changed to May 15, 2003 as a result of a settlement between U.S. EPA and the Sierra Club], and must contain the following information:
 - a. for a new affected source, the anticipated date of startup of operation;
 - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
 - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
 - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
 - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
 - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

The Part II application for a MACT determination may, but is not required to, contain the following information:

- a. recommended emission limitations for the affected source and support information. (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
- b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
- c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

A. State and Federally Enforcable Section (continued)

- 3.a** If the NESHAP is promulgated before May 15, 2004, the facility shall be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

Within 120 days after promulgation of 40 CFR Part 63, Subparts DDDDD and EEEEE, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report, in accordance with 40 CFR Part 63.9(b)(2):

- i. the name and mailing address of the permittee;
- ii. the physical location of the source if it is different from the mailing address;
- iii. identification of the relevant MACT standard and the source's compliance date;
- iv. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each HAP; and
- v. a statement confirming the facility is a major source for HAPs.

- 3.b** Within 60 days following completion of any required compliance demonstration activity specified in 40 CFR Part 63, Subparts DDDDD and EEEEE, the permittee shall submit a notification of compliance status that contains the following information:

- i. the methods used to determine compliance;
- ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
- iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
- iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR Part 63, Subparts DDDDD and EEEEE;
- v. an analysis demonstrating whether the affected source is a major source or an area source;
- vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
- vii. a statement of whether or not the permittee has complied with the requirements of 40 CFR Part 63, Subparts DDDDD and EEEEE.

B. State Only Enforceable Section

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

F005 - bond storage tank;
F006 - waste dust handling system and loadout;
P001 - gas-fired core ovens;
P017 - gray iron foundry core machine;
Z008 - makeup air unit #1;
Z009 - makeup air unit #2;
Z010 - makeup air unit #3;
Z004 - makeup air unit #4;
Z005 - makeup air unit #5;
Z006 - material handling (coke); and
Z007 - material handling (limestone).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Annealing Furnace (B003)

Activity Description: Gas fired Heat Treat Furnace For Softening Castings to Increase Machinability

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>
annealing furnace: natural gas-fired heat treat furnace	OAC rule 3745-17-11(B)	None, see section A.I.2.a below.
	OAC rule 3745-17-07(A)	None, see section A.I.2.b below.
	OAC rule 3745-18-06	None, see section A.I.2.c below.

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission 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.
- 2.c The equation specified in OAC rule 3745-18-06(E)(2) does not apply because the process weight, as defined in OAC rule 3745-18-01(B)(13), is equal to zero.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

Facility Name: **OSCO INDUSTRIES - PORTSMOUTH DIVISION**
Facility ID: **07-73-01-0001**
Emissions Unit: **Annealing Furnace (B003)**

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: DISA #1 MOLDING, POURING, COOLING, AND SHAKEOUT SYSTEM (F001)
Activity Description: MOLD MAKING, POURING, COOLING, AND SHAKEOUT SYSTEM

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>
Disamatic #1: mold making, pouring, cooling, and shakeout system	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	See section A.1.2.a below. Total particulate emissions from emissions units F001 and P013 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 11.7 lbs/hr.
cooling controlled with the East Foundry Dust Collection (EFDC) baghouse		
shakeout controlled with the West Dust Collection (WDC) baghouse		See sections A.1.2.d and A.1.2.e below.
pouring and cooling controlled with the Central Dust Collection (CDC) baghouse	OAC rule 3745-31-05(A)(3) (PTI 07-092)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-11(B) and 3745-17-07(A).

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.
- 2.c This emissions unit vents particulate emissions to each of the WDC, EFDC, and CDC baghouses. PTI 07-00509, issued on 8/22/02, established a baghouse outlet emission limitation of 0.015 grain/dscf of exhaust gases for each of the WDC, EFDC, and CDC baghouses.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.c. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.e** In accordance with OAC rule 3745-17-11(A)(3), the uncontrolled mass rate of emissions from F001 and P013 were combined to determine the Figure II emission limitation.

At the time emissions unit P013 was installed, pouring and cooling emissions were fugitive. Therefore, these emissions were not considered in determining the uncontrolled mass rate of emissions for use in Figure II.

Currently, the permittee controls pouring and cooling emissions with the WDC, EFDC, and CDC baghouses. In determining the summation of rule-based emission limitations as described in section A.1.2.d, the fugitive emissions from pouring and cooling, which are now vented to a baghouse, shall be included.

II. Operational Restrictions

1. The pressure drop across the EFDC, the WDC, and the CDC baghouses shall be maintained within the range of 2 to 9 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 each baghouse while the emissions unit is operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.1.1 and A.1.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

1.b Emission Limitation:

Total particulate emissions from emissions units F001 and P013 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 11.7 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the WDC baghouse: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

The following emissions units vent to the CDC baghouse: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the WDC, CDC, and EFDC baghouses.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted simultaneously at the WDC, CDC, and EFDC baghouse outlets with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the WDC, CDC, and EFDC baghouses operating at rates which support the maximum cupola melt rate.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC, and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

Facility Name: **OSCO INDUSTRIES - PORTSMOUTH DIVISION**
Facility ID: **07-73-01-0001**
Emissions Unit: **DISA #1 MOLDING, POURING, COOLING, AND SHAKEO**

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: Osborn Molding, Pouring, Cooling, and Shakout System (F002)
Activity Description: Mold Making, Pouring, Cooling, and Shakeout System

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>
Osborne Line: mold making, pouring, cooling, and shakeout system	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	See section A.1.2.a below. Total particulate emissions from emissions units F002 and F003 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 9.3 lbs/hr.
pouring, cooling, and shakeout controlled with the Central Dust Collection (CDC) baghouse		
shakeout controlled with the West Dust Collection (WDC) baghouse		

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.
- 2.c This emissions unit vents particulate emissions to the CDC baghouse. PTI 07-00509, issued on 8/22/02, established a baghouse outlet emission limitation of 0.015 grain/dscf of exhaust gases for the CDC baghouse.
- 2.d The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/ Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.c. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/ Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/ Figure II or PTI allowable emission limitations be exceeded.

II. Operational Restrictions

1. The pressure drop across the CDC and WDC baghouses shall be maintained within the range of 2 to 9 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 CDC and WDC baghouses while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the CDC or WDC baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

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

Applicable Compliance Method:

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

1.b Emission Limitation:

Total particulate emissions from emissions units F002 and F003 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 9.3 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

V. Testing Requirements (continued)

2. The following emissions units vent to the CDC baghouse: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The following emissions units vent to the WDC baghouse: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CDC and WDC baghouses.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted simultaneously at the CDC and WDC baghouse outlets with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the CDC and WDC baghouses operating at rates which support the maximum cupola melt rate.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC, and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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 Line Molding, Pouring, Cooling, and Shakeout (F003)

Activity Description: Mold Making, Pouring, Cooling, and Shakeout System

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>
East Line: mold making, pouring, cooling, and shakeout system	OAC rule 3745-17-07(A)	See section A.1.2.a below.
shakeout controlled with the East Foundry Dust Collection (EFDC) baghouse	OAC rule 3745-17-11(B)	Total particulate emissions from emissions units F002 and F003 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 9.3 lbs/hr.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.
- 2.c This emissions unit vents particulate emissions to the EFDC baghouse. PTI 07-00509, issued on 8/22/02, established a baghouse outlet emission limitation of 0.015 grain/dscf of exhaust gases for the EFDC baghouse.
- 2.d The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.c. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.

II. Operational Restrictions

1. The pressure drop across the EFDC baghouse shall be maintained within the range of 2 to 9 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 operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

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

Applicable Compliance Method:

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

1.b Emission Limitation:

Total particulate emissions from emissions units F002 and F003 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 9.3 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

V. Testing Requirements (continued)

2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the EFDC baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted simultaneously at the EFDC baghouse outlet with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the EFDC baghouse operating at rates which support the maximum cupola melt rate.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC, and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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: Stand Grinders (F004)
Activity Description: Stand Grinders, Rough Ground Castings

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>
20 stand grinders controlled with the cleaning room (CR) baghouse	OAC rule 3745-17-07(A)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	10 lbs/hr of particulate emissions See sections A.I.2.e and A.I.2.f below.
	OAC rule 3745-31-05(A)(3) (PTI 07-473)	Particulate emissions from this emissions unit shall not exceed 0.1 lb/hr and 0.5 tpy. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) See section A.I.2.c below.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b** This emissions unit vents particulate emissions to the CR baghouse. PTI 07-00506, issued on 7/12/01, established a CR baghouse outlet emission limitation of 0.02 grain/dscf of exhaust gases and 26.5 tpy.
- 2.c** Total particulate emissions from all of the emissions units vented to the CR baghouse shall not exceed 25.7 lbs/hr. The following emissions units are vented to the CR baghouse: F004, P014, P015, P016, P018, and P021. This baghouse outlet emission limitation is less stringent than the baghouse outlet emission limitation specified in section A.I.2.b.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.I.2.b. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.e** 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.f** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.
- 2.g** This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.

II. Operational Restrictions

1. The pressure drop across the CR baghouse shall be maintained within the range of 2 to 9 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 each baghouse while the emissions unit is operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.
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 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 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 weekly 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.

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

3. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-473, issued on 06/03/1999: A.III.1 and A.III.2. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-473, issued on 06/03/1999: A.IV.1 through A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-17-03(B)(1).
 - 1.b Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.1 lb/hr.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through emission tests performed in accordance with the requirements specified in section A.V.2.
 - 1.c Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.5 tpy.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the lb/hr particulate emission limitation.

V. Testing Requirements (continued)

1.d Emission Limitation:

Total particulate emissions from all of the emissions units vented to the CR baghouse shall not exceed 25.7 lbs/hr.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through emission tests performed in accordance with the requirements specified in section A.V.2.

1.e Emission Limitation:

Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be determined through emission testing performed in accordance with section A.V.2.

1.f Emission Limitation:

Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the grain per dry standard cubic foot of exhaust gases particulate emission limitation.

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.02 gr/dscf, times the maximum airflow from the baghouse (35,184 cf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

V. Testing Requirements (continued)

2. The following emissions units vent to the CR baghouse: F004, P014, P015, P016, P018, and P021.

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitations specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CR baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the CR baghouse outlet(s) with all of the emissions units which vent to the CR baghouse operating at or near maximum rates.
- e. Since multiple emissions units vent to a common baghouse and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from the CR baghouse will be compared to the baghouse outlet emission limitation of 0.02 grain/dscf for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

3. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-473, issued on 06/03/1999: A.V.1, and A.V.2. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

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 HoldingFurnace (F007)

Activity Description: Holding Furnace, Temperature and Chemistry Maintained Molten Iron for Transfer for Pouring.

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 induction holding furnace controlled with the East Foundry Dust Collection (EFDC) baghouse and the Central Dust Collection (CDC) baghouse	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 3745-17-11(B)	10 lbs/hr of particulate emissions See A.1.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 07-00509)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Fugitive particulate emissions from this emissions unit shall not exceed 0.71 lb/hr and 3.12 tpy. Visible particulate emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average. See section A.1.2.a below.

2. Additional Terms and Conditions

- 2.a** Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 grain/dscf and 36.65 tpy.

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 grain/dscf and 36.65 tpy.

If any additional emissions units are vented to the EFDC and/or the CDC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following emissions units vent to the EFDC: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the CDC: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The permittee reserves the right to direct the particulate emissions from any other existing or new emissions units (once permitted and thereby considered existing) to these fabric filters with the understanding that emissions shall not exceed 0.015 grain per actual cubic foot of the total exhaust gases and/or individual emissions unit's permitted allowable emission limitation.

This right is allowed as long as the permittee does not trigger the modification definition pursuant to Ohio Administrative Code (OAC) rule 3745-31-01 and submits information to the Ohio EPA within thirty days after the change (s) documenting the change(s). This information would include, but not limited to, the following: a description of which emissions units were redirected to which baghouse, and calculations supporting the permittee's contention that the redirection of existing emissions units would not trigger the modification definition pursuant to OAC rule 3745-31-01.

- 2.b** This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.
- 2.c** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.I.2.a. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.d** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.

II. Operational Restrictions

1. The pressure drop across the EFDC and the CDC baghouses shall be maintained within the range of 2 to 9 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 each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.
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 CDC and EFDC 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 abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the weekly 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. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-00509, issued on 8/22/02: A.III.1 and A.III.2. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-00509, issued on 8/22/02: A.IV.1 through A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

Fugitive particulate emissions from this emissions unit shall not exceed 0.71 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the 0.19 pound/ton emission factor by the maximum iron poured, in tons/hour times 0.15 assuming a 85% capture efficiency by the baghouse. The particulate emission factor was obtained from AP-42, Section 12, Table 12.5-1, dated 10/86.

1.b Emission Limitation:

Fugitive particulate emissions shall not exceed 3.12 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. Compliance with the ton per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

1.c Emission Limitation:

Visible particulate emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9.

1.d Emission Limitation:

Total particulate emissions from all of the emissions units vented to the EFDC baghouse shall not exceed 0.015 grain/dscf.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.e Emission Limitation:

Total particulate emissions from all of the emissions units vented to the CDC baghouse shall not exceed 0.015 grain/dscf.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

V. Testing Requirements (continued)

1.f Emission Limitation:

Total particulate emissions from all of the emissions units vented to the EFDC baghouse shall not exceed 36.65 tpy.

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour, divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

1.g Emission Limitation:

Total particulate emissions from all of the emissions units vented to the CDC baghouse shall not exceed 36.65 tpy.

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour, divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the CDC baghouse: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitations specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the EFDC and CDC baghouses.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the EFDC and CDC baghouse outlets with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the EFDC and CDC baghouses operating at rates which support the maximum cupola melt rate.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

3. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-00509, issued on 8/22/02: A.V.1 and A.V.2. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

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: Charge Handling (F008)
Activity Description: Transferring, Weighing, and Charging of Materials

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>
charge handling: transferring, weighing, and charging of materials	none	none

2. Additional Terms and Conditions

- 2.a This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, this fugitive dust emissions unit is exempt from the visible particulate emission limitations and the fugitive dust control requirements established in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<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: West Cooling Drum (P002)
Activity Description: Continuous Rotary Cooling Drum

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>
west cooling drum: continuous rotary cooling drum controlled with the West Dust Collection (WDC) baghouse	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	See section A.1.2.a below. Particulate emissions shall not exceed 8.0 lbs/hr (based on Figure II of OAC rule 3745-17-11).

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b This emissions unit vents particulate emissions to the WDC baghouse. PTI 07-00509, issued on 8/22/02, established a baghouse outlet emission limitation of 0.015 grain/dscf of exhaust gases for the WDC baghouse.
- 2.c The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.b. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.

II. Operational Restrictions

1. The pressure drop across the WDC baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of the terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

- 1.b Emission Limitation:

Particulate emissions shall not exceed 8.0 lbs/hr (based on Figure II of OAC rule 3745-17-11).

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

2. The following emissions units vent to the WDC baghouse: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.

- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the WDC baghouse.

- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted at the WDC baghouse outlet with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the WDC baghouse operating at rates which support the maximum cupola melt rate.

- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC, and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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 Cooling Drum (P005)
Activity Description: Continuous Rotary Cooling Drum

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>
east cooling drum: continuous rotary cooling drum controlled with the East Foundry Dust Collection (EFDC) baghouse	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	See section A.1.2.a below. Particulate emissions shall not exceed 6.2 lbs/hr (based on Figure II of OAC rule 3745-17-11).

2. Additional Terms and Conditions

- Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- This emissions unit vents particulate emissions to the EFDC baghouse. PTI 07-00509, issued on 8/22/02, established a baghouse outlet emission limitation of 0.015 grain/dscf of exhaust gases for the EFDC baghouse.
- The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.b. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.

II. Operational Restrictions

- The pressure drop across the EFDC baghouse shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

1.b Emission Limitation:

Particulate emissions shall not exceed 6.2 lbs/hr (based on Figure II of OAC rule 3745-17-11).

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the EFDC baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the EFDC baghouse outlet with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the EFDC baghouse operating at rates which support the maximum cupola melt rate.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC, and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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: Disa #2 Molding, Pouring, Cooling, and Shakeout System (P013)

Activity Description: Mold Making, Pouring, Cooling, and Shakeout System

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>
Disamatic #2: mold making, pouring, cooling, and shakeout system	OAC rule 3745-17-07(A)	Visible particulate emissions from the WDC baghouse stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
cooling controlled with the East Foundry Dust Collection (EFDC) baghouse	OAC rule 3745-17-11(B)	Total particulate emissions from emissions units F001 and P013 combined (based on Figure II of OAC rule 3745-17-11) shall not exceed 11.7 lbs/hr.
pouring, cooling, and shakeout controlled with the West Dust Collection (WDC) baghouse		See sections A.I.2.c and A.I.2.d below.
cooling controlled with the Central Dust Collection (CDC) baghouse		The emission limitation established 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 3745-31-05(A)(3) (PTI 07-00509)	Visible particulate emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average. Volatile organic compound emissions shall not exceed 13.9 lbs/hr and 25.02 tpy. Carbon monoxide emissions shall not exceed 50.0 lbs/hr and 90.0 tpy. Nitrogen oxides emissions shall not exceed 0.10 lb/hr and 0.18 tpy. Sulfur dioxide emissions shall not exceed 0.20 lb/hr and 0.36 tpy. Fugitive particulate emissions shall not exceed 0.86 lb/hr and 1.55 tpy.

2. Additional Terms and Conditions

2.a Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 gr/dscf of exhaust gases and 36.65 tpy.

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 gr/dscf of exhaust gases and 36.65 tpy.

Particulate emissions from the WDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 gr/dscf of exhaust gases and 34.04 tpy.

If any additional emissions units are vented to the EFDC, CDC, and/or the WDC baghouses, each dust collector's allowable rate shall remain at 0.015 gr/dscf of exhaust gases.

The following emissions units vent to the EFDC: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the CDC: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The following emissions units vent to the WDC: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

2. Additional Terms and Conditions (continued)

The permittee reserves the right to direct the particulate emissions from any other existing or new emissions units (once permitted and thereby considered existing) to these fabric filters with the understanding that emissions will not exceed 0.015 grain per actual cubic foot of the total exhaust gases and/or individual emission unit's permitted allowable emission limitation.

This right is allowed as long as the permittee does not trigger the modification definition pursuant to Ohio Administrative Code (OAC) rule 3745-31-01 and submits information to the Ohio EPA within thirty days after the change (s) documenting the change(s). This information would include, but not limited to, the following: a description of which emissions units were redirected to which baghouse, and calculations supporting the permittee's contention that the redirection of existing emissions units would not trigger the modification definition pursuant to OAC rule 3745-31-01.

- 2.b** This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rules 3745-17-07 and 3745-17-08, respectively.
- 2.c** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.I.2.a. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.d** In accordance with OAC rule 3745-17-11(A)(3), the uncontrolled mass rate of emissions from F001 and P013 were combined to determine the Figure II emission limitation.

At the time emissions unit P013 was installed, pouring and cooling emissions were fugitive. Therefore, these emissions were not considered in determining the uncontrolled mass rate of emissions for use in Figure II.

Currently, the permittee controls pouring and cooling emissions with the WDC, EFDC, and CDC baghouses. In determining the summation of rule-based emission limitations as described in section A.I.2.c, the fugitive emissions from pouring and cooling, which are now vented to a baghouse, shall be included.

II. Operational Restrictions

- 1.** The pressure drop across the WDC, the CDC, and the EFDC baghouses shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation.

II. Operational Restrictions (continued)

2. The maximum annual production rate for this emissions unit shall not exceed 36,000 tons, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation after the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month	Maximum Allowable Cumulative Production
1	3,000
1-2	6,000
1-3	9,000
1-4	12,000
1-5	15,000
1-6	18,000
1-7	21,000
1-8	24,000
1-9	27,000
1-10	30,000
1-11	33,000
1-12	36,000

After the first 12 calendar months of operation after the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.
2. The permittee shall maintain monthly records of the following information:
 - a. the production rate for each month; and
 - b. beginning after the first 12 calendar months of operation after the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation after issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

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 CDC, EFDC, and WDC 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 abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-00509, issued on 8/22/02: A.III.1 through A.III.4. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse did not comply with the allowable range specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation and, for the first 12 calendar months of operation after issuance of this permit, all exceedances of the maximum allowable cumulative production levels.
3. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the CDC, EFDC, or WDC baghouse stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

IV. Reporting Requirements (continued)

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.
6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-00509, issued on 8/22/02: A.IV.1 through A.IV.5. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-07-03(B)(1).

- 1.b Emission Limitation:

Particulate emissions from the WDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 gr/dscf.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.c Emission Limitation:

Particulate emissions from the WDC baghouse, of all emissions units vented to the baghouse, shall not exceed 34.04 tpy.

Applicable Compliance Methods:

The tpy emission limitation was determined by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (60,439 scf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

- 1.d Emission Limitation:

Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 gr/dscf.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

V. Testing Requirements (continued)

1.e Emission Limitation:

Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tpy.

Applicable Emission Limitation:

The tpy emission limitation was determined by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

1.f Emission Limitation:

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 0.015 gr/dscf.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.g Emission Limitation:

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tpy.

Applicable Emission Limitation:

The tpy emission limitation was determined by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

1.h Emission Limitation:

Volatile organic compound emissions shall not exceed 13.90 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. Pouring & Cooling:

Multiply the 0.19 pound/ton VOC emission factor by the maximum iron poured, in tons/hour. The VOC emission factor obtained from a Casting Emissions Reduction Program document titled "Foundry Process Emission Factors: Baseline Emissions from Automotive Foundries in Mexico", dated 1/19/99.

ii. Shakeout:

Multiply the 1.2 pound/ton VOC emission factor by the maximum iron poured, in tons/hour. The VOC emission factor obtained from the FIRE database Version 6.23 (SCC 3-04-003-31).

V. Testing Requirements (continued)

1.i Emission Limitation:

Volatile organic compound emissions shall not exceed 25.02 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. Pouring & Cooling:

Multiply the 0.19 pound/ton VOC emission factor by the actual iron poured, in tpy, and divide by 2,000 pounds/ton. The VOC emission factor obtained from a Casting Emissions Reduction Program document titled "Foundry Process Emission Factors: Baseline Emissions from Automotive Foundries in Mexico", dated 1/19/99.

ii. Shakeout:

Multiply the 1.2 pound/ton VOC emission factor by the actual iron poured, in tpy, and divide by 2,000 pounds/ton. The VOC emission factor obtained from the FIRE database Version 6.23 (SCC 3-04-003-31).

1.j Emission Limitation:

Carbon monoxide emissions shall not exceed 50.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the CO emission factor, in pounds of CO/ton of iron poured, by the maximum quantity of iron poured, in tons/hour. The CO emission factor shall be calculated from the results of the most recent stack test which demonstrated compliance.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A , Methods 1 through 4 and 10.

1.k Emission Limitation:

Carbon monoxide emissions shall not exceed 90.0 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the CO emission factor, in pounds/ton, times the actual iron poured, in tpy, divided by 2,000 pounds/ton. The CO emission factor shall be calculated from the results of the most recent stack test which demonstrated compliance.

1.l Emission Limitation:

Nitrogen oxides emissions shall not exceed 0.10 lb/hr.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.01 pound/ton NOx emission factor by the maximum iron poured/cooled, in tons/hour. The NOx emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

V. Testing Requirements (continued)

1.m Emission Limitation:

Nitrogen oxides emissions shall not exceed 0.18 tpy.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.01 pound/ton NOx emission factor by the actual iron poured/cooled, in tpy, and divide by 2,000 pounds/ton. The NOx emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

1.n Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.20 lb/hr.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.02 pound/ton SO2 emission factor by the maximum iron poured/cooled, in tons/hour. The SO2 emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

1.o Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.36 tpy.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.02 pound/ton SO2 emission factor by the actual iron poured/cooled, in tons/year, and divide by 2,000 pounds/ton. The SO2 emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

V. Testing Requirements (continued)

1.p Emission limitation:

Fugitive particulate emissions shall not exceed 0.86 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. Mold Making:

Multiply the 0.04 pound/ton emission factor by the maximum iron poured, in tons/hour, times 0.30 assuming a 70% building capture efficiency. The particulate emission factor was obtained from RACM, Table 2.7-1, #15, dated 11/80.

ii. Pouring:

Multiply the 2.8 pound/ton particulate emission factor by the maximum iron poured, in tons/hour, times 0.01 assuming a 99% capture efficiency by the baghouse. The particulate emission factor was obtained from AP-42 Section 12, Table 12.10-7, dated 1-95.

iii. Cooling

Multiply the 1.4 pound/ton particulate emission factor by the maximum iron poured, in tons/hour, times 0.01 assuming a 99% capture efficiency by the baghouse. The particulate emission factor was obtained from AP-42 Section 12, Table 12.10-7, dated 1-95.

iv. Shakeout:

Multiply the 3.20 pound/ton particulate emission factor by the maximum iron poured, in tons/hour, times 0.01 assuming a 99% capture efficiency by the baghouse. The particulate emission factor was obtained from the AP-42, Section 12, Table 12.10-7, dated 1/95.

1.q Emission limitation:

Fugitive particulate emissions shall not exceed 1.55 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. Mold Making:

Multiply the 0.04 pound/ton emission factor by the actual iron poured, in tpy, divided by 2,000 pounds/ton, times 0.30 assuming a 70% building capture efficiency. The particulate emission factor was obtained from RACM, Table 2.7-1, #15, dated 11/80.

ii. Pouring:

Multiply the 2.8 pound/ton particulate emission factor by the actual iron poured, in tpy, times 0.01 assuming a 99% capture efficiency by the baghouse, and divided by 2,000 pounds/ton. The particulate emission factor was obtained from AP-42 Section 12, Table 12.10-7, dated 1-95.

iii. Cooling:

Multiply the 1.4 pound/ton particulate emission factor by the actual iron poured, in tpy, times 0.01 assuming a 99% capture efficiency by the baghouse, and divide by 2,000 pounds/ton. The particulate emission factor was obtained from AP-42 Section 12, Table 12.10-7, dated 1-95.

iv. Shakeout:

Multiply the 3.20 pound/ton particulate emission factor by the actual iron poured, in tpy, times 0.01 assuming a 99% capture efficiency by the baghouse, and divide by 2,000 pounds/ton. The particulate emission factor was obtained from the AP-42, Section 12, Table 12.10-7, dated 1/95.

V. Testing Requirements (continued)

1.r Emission Limitation:

Visible particulate emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9.

2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the WDC baghouse: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

The following emissions units vent to the CDC baghouse: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitations specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the WDC, CDC, and EFDC baghouses.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted simultaneously at the WDC, CDC, and EFDC baghouse outlets with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the WDC, CDC, and EFDC baghouses operating at rates which support the maximum cupola melt rate.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC, and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

3. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-00509, issued on 8/22/02: A.V.1 and A.V.2. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

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: Wheelabrator #5 (P014)
Activity Description: Shotblaster, Casting Cleaning

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>
Wheelabrator #5: shotblaster, casting cleaning controlled with the cleaning room (CR) baghouse	OAC rule 3745-17-07(A)	See section A.1.2.a below.
	OAC rule 3745-17-11(B)	10 lbs/hr of particulate emissions See section A.1.2.e below.
	OAC rule 3745-31-05(A)(3) (PTI 07-275)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Particulate emissions from this emissions unit shall not exceed 0.13 lb/hr and 0.55 tpy. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). See section A.1.2.b below.

2. Additional Terms and Conditions

- Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- This emissions unit vents particulate emissions to the CR baghouse. PTI 07-00506, issued on 7/12/01, established a CR baghouse outlet emission limitation of 0.02 grain/dscf of exhaust gases and 26.5 tpy.
- Total particulate emissions from all of the emissions units vented to the CR baghouse shall not exceed 25.7 lbs/hr. The following emissions units are vented to the CR baghouse: F004, P014, P015, P016, P018, and P021. This baghouse outlet emission limitation is less stringent than the baghouse outlet emission limitation specified in A.1.2.b.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.b. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.e** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.

II. Operational Restrictions

1. The pressure drop across the CR baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
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 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 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 weekly 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

IV. Reporting Requirements (continued)

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

- 1.b Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.13 lb/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.c Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.55 tpy.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the lb/hr particulate emission limitation.

- 1.d Emission Limitation:

The total particulate emissions from the CR baghouse shall not exceed 25.7 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.e Emission Limitation:

Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be determined through emission testing performed in accordance with section A.V.2.

V. Testing Requirements (continued)

1.f Emission Limitation:

Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the grain per dry standard cubic foot of exhaust gases particulate emission limitation.

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.02 gr/dscf, times the maximum airflow from the baghouse (35,184 cf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

2. The following emissions units vent to the CR baghouse: F004, P014, P015, P016, P018, and P021.

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CR baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the CR baghouse outlet(s) with all of the emissions units which vent to the CR baghouse operating at or near maximum rates.
- e. Since multiple emissions units vent to a common baghouse and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from the CR baghouse will be compared to the baghouse outlet emission limitation of 0.02 grain/dscf for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

Facility Name: **OSCO INDUSTRIES - PORTSMOUTH DIVISION**
Facility ID: **07-73-01-0001**
Emissions Unit: **Wheelabrator #5 (P014)**

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: Wheelabrator #2 (P015)
Activity Description: Shotblaster, Casting Cleaning

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>
Wheelabrator #2: shotblaster, casting cleaning controlled with the cleaning room (CR) baghouse	OAC rule 3745-17-07(A)	See section A.1.2.a below.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 10 lbs/hr. See section A.1.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.
- 2.c This emissions unit vents particulate emissions to the CR baghouse. PTI 07-00506, issued on 7/12/01, established a CR baghouse outlet emission limitation of 0.02 grain/dscf of exhaust gases and 26.5 tpy.
- 2.d The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.c. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.

II. Operational Restrictions

1. The pressure drop across the CR baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
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 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 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 weekly 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Limitation:

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

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions shall not exceed 10 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.c Emission Limitation:

Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be determined through emission testing performed in accordance with section A.V.2.

1.d Emission Limitation:

Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the grain per dry standard cubic foot of exhaust gases particulate emission limitation.

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.02 gr/dscf, times the maximum airflow from the baghouse (35,184 cf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

2. The following emissions units vent to the CR baghouse: F004, P014, P015, P016, P018, and P021.

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CR baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the CR baghouse outlet(s) with all of the emissions units which vent to the CR baghouse operating at or near maximum rates.
- e. Since multiple emissions units vent to a common baghouse and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from the CR baghouse will be compared to the baghouse outlet emission limitation of 0.02 grain/dscf for the purpose of demonstrating compliance.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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: Wheelabrator #4 (P016)
Activity Description: Shotblaster, Casting Cleaning

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>
Wheelabrator #4: shotblaster, casting cleaning controlled with the cleaning room (CR) baghouse	OAC rule 3745-17-07(A)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	10 lbs/hr of particulate emissions See section A.I.2.e below.
	OAC rule 3745-31-05(A)(3) (PTI 07-334)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Particulate emissions from this emissions unit shall not exceed 0.03 lb/hr and 0.14 tpy. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). See section A.I.2.b below.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b** This emissions unit vents particulate emissions to the CR baghouse. PTI 07-00506, issued on 7/12/01, established a CR baghouse outlet emission limitation of 0.02 grain/dscf of exhaust gases and 26.5 tpy.
- 2.c** Total particulate emissions from all of the emissions units vented to the CR baghouse shall not exceed 25.7 lbs/hr. The following emissions units are vented to the CR baghouse: F004, P014, P015, P016, P018, and P021. This baghouse outlet emission limitation is less stringent than the baghouse outlet emission limitation specified in section A.I.2.b.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.b. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.e** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.

II. Operational Restrictions

1. The pressure drop across the CR baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
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 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 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 weekly 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

IV. Reporting Requirements (continued)

- 3.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

- 1.b** Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.03 lb/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.c** Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.14 tpy.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the lb/hr particulate emission limitation.

- 1.d** Emission Limitation:

The total particulate emissions from the CR baghouse shall not exceed 25.7 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.e** Emission Limitation:

Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be determined through emission testing performed in accordance with section A.V.2.

V. Testing Requirements (continued)

1.f Emission Limitation:

Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the grain per dry standard cubic foot of exhaust gases particulate emission limitation.

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.02 gr/dscf, times the maximum airflow from the baghouse (35,184 cf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

2. The following emissions units vent to the CR baghouse: F004, P014, P015, P016, P018, and P021.

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitations specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CR baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the CR baghouse outlet(s) with all of the emissions units which vent to the CR baghouse operating at or near maximum rates.
- e. Since multiple emissions units vent to a common baghouse and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from the CR baghouse will be compared to the baghouse outlet emission limitation of 0.02 grain/dscf for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

Facility Name: **OSCO INDUSTRIES - PORTSMOUTH DIVISION**
Facility ID: **07-73-01-0001**
Emissions Unit: **Wheelabrator #4 (P016)**

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: WHEELABRATOR #6 (P018)

Activity Description: 34" cubic foot Shot Blaster used for cleaning the castings

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>
Wheelabrator #6: shotblaster, casting cleaning controlled with the cleaning room (CR) baghouse	OAC rule 3745-17-07(A)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	10 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 07-386)	<p>See section A.I.2.e below.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>Particulate emissions from this emissions unit shall not exceed 0.06 lb/hr and 0.26 tpy.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).</p>
		See section A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b This emissions unit vents particulate emissions to the CR baghouse. PTI 07-00506, issued on 7/12/01, established a CR baghouse outlet emission limitation of 0.02 grain/dscf of exhaust gases and 26.5 tpy.
- 2.c Total particulate emissions from all of the emissions units vented to the CR baghouse shall not exceed 25.7 lbs/hr. The following emissions units are vented to the CR baghouse: F004, P014, P015, P016, P018, and P021. This baghouse outlet emission limitation is less stringent than the baghouse outlet emission limitation specified in A.I.2.b.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee is operating by venting multiple emissions units to common baghouses. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses is less stringent than the PTI allowable emissions for the baghouses listed in section A.1.2.b. If the permittee makes changes in the equipment vented to the baghouses, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouses shall be reevaluated to determine if they are still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.e** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.

II. Operational Restrictions

1. The pressure drop across the CR baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
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 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 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 weekly 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

IV. Reporting Requirements (continued)

- 3.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

- 1.b** Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.06 lb/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.c** Emission Limitation:

Particulate emissions from this emissions unit shall not exceed 0.26 tpy.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the lb/hr particulate emission limitation.

- 1.d** Emission Limitation:

The total particulate emissions from the CR baghouse shall not exceed 25.7 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

- 1.e** Emission Limitation:

Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be determined through emission testing performed in accordance with section A.V.2.

V. Testing Requirements (continued)

1.f Emission Limitation:

Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the grain per dry standard cubic foot of exhaust gases particulate emission limitation.

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.02 gr/dscf, times the maximum airflow from the baghouse (35,184 cf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

2. The following emissions units vent to the CR baghouse: F004, P014, P015, P016, P018, and P021.

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitations specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CR baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the CR baghouse outlet(s) with all of the emissions units which vent to the CR baghouse operating at or near maximum rates.
- e. Since multiple emissions units vent to a common baghouse and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from the CR baghouse will be compared to the baghouse outlet emission limitation of 0.02 grain/dscf for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

Facility Name: **OSCO INDUSTRIES - PORTSMOUTH DIVISION**
Facility ID: **07-73-01-0001**
Emissions Unit: **WHEELABRATOR #6 (P018)**

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: West Sand System (P019)

Activity Description: Prepared Molding Sand

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>
west sand system: prepared molding sand controlled with the West Sand System Dust Collection (WSSDC) baghouse	OAC rule 3745-17-07(A)	See section A.1.2.a below.
	OAC rule 3745-17-11(B)	8.0 lbs/hr of particulate emissions (based on Figure II of OAC rule 3745-17-11)

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

II. Operational Restrictions

1. The pressure drop across the WSSDC baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

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 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 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 weekly 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-17-03(B)(1).
 - 1.b Emission Limitation:

8.0 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitation specified in section A.I.1.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted at the baghouse outlet with one of the cupolas operating at or near the maximum melt rate and the emissions unit operating at a rate which support the maximum cupola melt rate.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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 Sand System (P020)

Activity Description: Prepared Molding Sand

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>
east sand system: molding sand muller and silo controlled with the East Sand System Dust Collection (ESSDC) baghouse	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 3745-17-11(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).
	OAC rule 3745-31-05(A)(3) (PTI 07-367)	Particulate emissions shall not exceed 0.015 gr/dscf. There shall be no visible emissions from the ESSDC baghouse stack.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the ESSDC baghouse shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

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 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
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 Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Particulate emissions shall not exceed 0.015 gr/dscf.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.b Emission Limitation:

There shall be no visible emissions from the ESSDC baghouse stack.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22 and the methods and procedures required in OAC rule 3745-17-03(B)(4).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitation: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth local air agency.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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: Wheelabrator #1 (P021)
Activity Description: New 34 cu.ft. Shotblaster #1 replaced the old 28 cu.ft. #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>
Wheelabrator #1: shotblaster, casting cleaning controlled with the cleaning room (CR) baghouse	OAC rule 3745-17-07(A)	See section A.1.2.a below.
	OAC rule 3745-17-11(B)	10 lbs/hr of particulate emissions See section A.1.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 07-00506)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.
		Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year. See section A.1.2.b below.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions (continued)

- 2.b** If any additional sources are vented to the CR baghouse, the baghouse allowable rate shall remain 0.02 grain per dry standard cubic foot of exhaust gases. The following emissions units are vented to the CR baghouse: F004, P014, P015, P016, P018, and P021.
- 2.c** The permittee is operating by venting multiple emissions units to a common baghouse. At the time of this permit issuance, the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouse is less stringent than the PTI allowable emissions for the baghouse listed in section A.1.2.b. If the permittee makes changes in the equipment vented to the baghouse, then the summation of the applicable (most stringent) Table I/Figure II or PTI emission limitations for the emissions units that are vented to the baghouse shall be reevaluated to determine if it is still less stringent than the PTI allowable emissions. In no case shall the applicable (most stringent) Table I/Figure II or PTI allowable emission limitations be exceeded.
- 2.d** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 lbs/hr.

II. Operational Restrictions

1. The pressure drop across the CR baghouse shall be maintained within the range of 2 to 9 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
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 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 pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.
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 Portsmouth 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 sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

1.b Emission Limitation:

Particulate emissions from the CR baghouse shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.c Emission Limitation:

Particulate emissions from the CR baghouse, of all sources vented to the baghouse, shall not exceed 26.5 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation can be assumed provided that the permittee demonstrates compliance with the grains per dry standard cubic feet of exhaust gases particulate emission limitation.

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.02 gr/dscf, times the maximum airflow from the baghouse (35,184 cf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

V. Testing Requirements (continued)

2. The following emissions units vent to the CR baghouse: F004, P014, P015, P016, P018, and P021.

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission limitations specified in section A.I.1 and the allowable particulate mass emission limitations for the other emissions units vented to the CR baghouse.
- c. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission limitations: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the CR baghouse outlet(s) with all of the emissions units which vent to the CR baghouse operating at or near maximum rates.
- e. Since multiple emissions units vent to a common baghouse and it is not reasonable to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from the CR baghouse will be compared to the baghouse outlet emission limitation of 0.02 grain/dscf for the purpose of demonstrating compliance.

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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: WEST CUPOLA (P906)

Activity Description: Cupola; melting of metallic materials to form molten gray iron castings

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>
west iron cupola: melting of metallic materials to form molten gray iron castings controlled with a venturi scrubber	OAC rule 3745-17-07(A)	See A.1.2.a below.
	OAC rule 3745-18-06(E)(2)	259.3 lbs/hr of sulfur dioxide (SO ₂)
	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).
	OAC rule 3745-31-05(A)(3) (PTI 07-380)	Particulate emissions shall not exceed 20.3 lbs/hr and 44.45 tpy. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, this fugitive dust emissions unit is exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively.

II. Operational Restrictions

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 28 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate shall be continuously maintained at a value of not less than 125 gallons per minute at all times while the emissions unit is in operation.

II. Operational Restrictions (continued)

2. The permittee shall operate no more than one cupola at any time.
3. The permittee shall not employ coke with greater than 4% sulfur content in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day:
 - a. the pressure drop across the scrubber, in inches of water, once per shift;
 - b. the scrubber water flow rate, in gallons per minute, once per shift;
 - c. the total operating hours for this emissions unit; and
 - d. the downtime for the capture (collection) system, control device, monitoring equipment when the associated emissions unit was in operation.
3. The permittee shall maintain monthly records of all periods of time during which the west cupola (P906) and the east cupola (P907) are in operation at the same time.
4. The permittee shall maintain monthly records of the following:
 - a. fuel analysis report from the supplier demonstrating the sulfur content of the coke; and
 - b. average SO₂ emissions, in lbs/hr, (1.2 times % sulfur times the maximum tons/hour of iron produced).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber water flow rate.

The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

2. The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall notify the Portsmouth local air agency in writing of any monthly record showing any periods of time during which the west cupola (P906) and the east cupola (P907) were in operation at the same time. The notification shall include a copy of such record and shall be sent to the Portsmouth local air agency within 30 days following the end of the calendar month.
4. The permittee shall also submit annual reports which specify the total particulate emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Portsmouth local air agency in writing of any record showing the sulfur content of the coke exceeded the restriction in section A.II.3. The notification shall include a copy of such record and shall be sent to the Portsmouth local air agency within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

1.b Emission Limitation:

Particulate emissions shall not exceed 20.3 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.c Emission Limitation:

Particulate emissions shall not exceed 44.45 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (lb/hr), as measured during the most recent stack test, times the actual annual hours of operation, and dividing by 2,000 lbs/ton.

1.d Emission Limitation:

259.3 lbs/hr of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum tons of iron/hour times the SO₂ emission factor of 1.2 pounds/ton and times the % sulfur of the coke. The SO₂ emission factor was obtained from AP-42, Section 12, Table 12.10-5, dated 1/95.

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

a. The emission testing shall be conducted within 3 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation for particulates.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable particulate mass emission limitation: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth local air agency.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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 Cupola (P907)

Activity Description: Cupola; melting of metallic materials to form molten iron for making gray iron castings

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>
east iron cupola: melting of metallic materials to form molten gray iron castings controlled with a venturi scrubber	OAC rule 3745-17-07(A)	See A.1.2.a below.
	OAC rule 3745-18-06(E)(2)	259.3 lbs/hr of sulfur dioxide (SO ₂)
	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).
	OAC rule 3745-31-05(A)(3) (PTI 07-380)	Particulate emissions shall not exceed 20.3 lbs/hr and 44.45 tpy. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

- Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, this fugitive dust emissions unit is exempt from the visible particulate emission limitation and the fugitive dust control requirements established in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively.

II. Operational Restrictions

- The pressure drop across the scrubber shall be continuously maintained at a value of not less than 28 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate shall be continuously maintained at a value of not less than 125 gallons per minute at all times while the emissions unit is in operation.

II. Operational Restrictions (continued)

2. The permittee shall operate no more than one cupola at any time.
3. The permittee shall not employ coke with greater than 4% sulfur content in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day:
 - a. the pressure drop across the scrubber, in inches of water, once per shift;
 - b. the scrubber water flow rate, in gallons per minute, once per shift;
 - c. the total operating hours for this emissions unit; and
 - d. the downtime for the capture (collection) system, control device, monitoring equipment when the associated emissions unit was in operation.
3. The permittee shall maintain monthly records of all periods of time during which the west cupola (P906) and the east cupola (P907) are in operation at the same time.
4. The permittee shall maintain monthly records of the following:
 - a. fuel analysis report from the supplier demonstrating the sulfur content of the coke; and
 - b. average SO₂ emissions, in lbs/hr, (1.2 times % sulfur times the maximum tons/hour of iron produced).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber water flow rate.

The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

2. The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall notify the Portsmouth local air agency in writing of any monthly record showing any periods of time during which the west cupola (P906) and the east cupola (P907) were in operation at the same time. The notification shall include a copy of such record and shall be sent to the Portsmouth local air agency within 30 days following the end of the calendar month.
4. The permittee shall also submit annual reports which specify the total particulate emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Portsmouth local air agency in writing of any record showing the sulfur content of the coke exceeded the restriction in section A.II.3. The notification shall include a copy of such record and shall be sent to the Portsmouth local air agency within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

1.b Emission Limitation:

Particulate emissions shall not exceed 20.3 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through emission testing performing in accordance with section A.V.2.

1.c Emission Limitation:

Particulate emissions shall not exceed 44.45 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (lb/hr), as measured during the most recent stack test, times the actual annual hours of operation, and dividing by 2,000 lbs/ton.

1.d Emission Limitation:

259.3 lbs/hr of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum tons of iron/hour times the SO₂ emission factor of 1.2 pounds/ton and times the % sulfur of the coke. The SO₂ emission factor was obtained from AP-42, Section 12, Table 12.10-5, dated 1/95.

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

a. The emission testing shall be conducted approximately 2.5 years after permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation for particulates.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable particulate mass emission limitation: Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth local air agency.

V. Testing Requirements (continued)

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

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

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 Portsmouth local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth local air agency.

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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