



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

04/15/03

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

06-60-01-0101

Burnham Foundry
Jeremiah A. Clegg
2345 Licking Road
Zanesville, OH 43702

Dear Jeremiah A. Clegg:

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 Southeast District Office.

Very truly yours,

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

cc: Southeast District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 04/15/03

Effective Date: 05/06/03

Expiration Date: 05/06/08

This document constitutes issuance of a Title V permit for Facility ID: 06-60-01-0101 to:

Burnham Foundry
2345 Licking Road
P.O. Box 2398
Zanesville, OH 43701

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

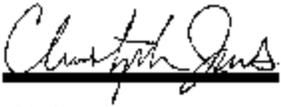
Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include F003, F004, F008, F009, F010, F012, F013, F014, F015, F016, F017, F018, F019, F020, F021, F022, F025, F026, F027, P014, P905, and Z001.

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:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

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. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (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)

Facility Name: Burnham Foundry
Facility ID: 06-60-01-0101

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 may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron & Steel Foundries, 40 CFR Part 63, Subpart EEEEE. 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 permittee is subject to the NESHAP and the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
 - 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. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:

- a. If the permittee is subject to the NESHAP, unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, 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, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
 - v. a statement confirming the facility is a major source for HAPs.

Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, 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 the relevant Subpart;
- 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 the relevant Subpart.

B. State Only Enforceable Section

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

F023 - roadways and parking areas;
F024 - storage piles;
Z002 - hand grinding of castings;
Z003 - ladle rebuilding/mold cleaning;
Z004 - slag pouring/cooling trough;
Z005 - 6,000-gallon air compressor oily wastewater storage tank;
Z006 - 1,000-gallon waste oil storage tank;
Z007 - 1,000-gallon oil separation tank for WWTP clarifier;
Z008 - 5,000-gallon core room resin storage tank;
Z009 - 9 air make-up units; and
Z010 - wastewater treatment plant.

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: Unit 3 Pouring and Cooling (F003)
Activity Description: Molten iron poured into sand molds and cooled to form 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>
pouring and cooling unit #3	OAC rules 3745-17-07 and 3745-17-08	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive particulate emissions from this emissions unit.
- 2.b This emissions unit was installed in 1971 and is exempt from OAC rule 3745-21-07.

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: Unit 3 Casting Shakeout (F004)

Activity Description: Sandy castings pass along vibratory conveyor to shake off 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>
casting shakeout unit #3 vented to a wet scrubber	OAC rule 3745-17-11(B)	Particulate emissions from the wet scrubber shall not exceed 5.4 lbs/hr, based upon Figure II.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

* This emissions unit operates very infrequently, e.g., 268 hours in 2001 and 284 hours in 2002; therefore, a monthly visible emission check is deemed to be reasonable for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

1.a Emission Limitation:

5.4 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

Facility Name: **Burnham Foundry**
Facility ID: **06-60-01-0101**
Emissions Unit: **Unit 3 Casting Shakeout (F004)**

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: Coremaking Machines #1, #2 (Baking Line #1) (F008)
Activity Description: Sand and binders mixed and baked to form sand molds.

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>
coremaking machines #1 and #2 - baking line #1	OAC rules 3745-17-07 and 3745-17-08	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive particulate emissions from this emissions unit.
- 2.b This emissions unit was installed in 1964 and is exempt from OAC rule 3745-21-07.

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: Coremaking Machines #3, #4 (Baking Line #2) (F009)
Activity Description: Sand and binders mixed and baked to form sand molds.

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>
coremaking machines #3 and #4 - baking line #2	OAC rules 3745-17-07 and 3745-17-08	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive particulate emissions from this emissions unit.
- 2.b This emissions unit was installed in 1969 and is exempt from OAC rule 3745-21-07.

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: Coremaking Machines #5, #6 (Baking Line #3) (F010)
Activity Description: Sand and binders mixed and baked to form sand molds.

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>
coremaking machines #5 and #6 - baking line #3	OAC rules 3745-17-07 and 3745-17-08	See A.I.2.a below.
	OAC rule 3745-21-07(G)(2)	8 lbs/hr of organic compounds (OC)
		40 lbs/day of OC

2. Additional Terms and Conditions

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the amount of resin employed, in pounds;
 - b. the hours of operation;
 - c. the calculated OC emissions, in pounds (calculated by multiplying (a) times an emission factor [provided by the resin supplier - HA International] of 0.000240 lb of OC/lb of resin employed); and
 - d. the average hourly OC emissions, i.e., (c)/(b).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly OC emissions exceeded 8 lbs/hr, and the actual average hourly OC emissions for each such day; and
 - b. an identification of each day during which the OC emissions exceeded 40 lbs/day, and the actual OC emissions for each such day.

V. Testing Requirements

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

1.a Emission Limitation:

8 lbs/hr of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

1.b Emission Limitation:

40 lbs/day of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sand and Bond Unloading and Storage (F012)

Activity Description: Sand and bond unloading and storage in bins.

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>
Sand and bond unloading and storage controlled with a fabric filter bin vent	OAC rule 3745-31-05(A)(3) (PTI 06-2072)	The bond silo truck loading operations shall be vented to a fabric filter bin vent which shall achieve a particulate emission rate of not greater than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent.
		See A.I.2.c below.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.
- 2.c Sand shall be handled with enclosures on the elevators and covers on the conveyors.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-2072, issued on January 13, 1988: 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.
2. The permittee shall perform weekly checks, when this emissions unit is in operation, for any visible particulate emissions from the exhaust of the fabric filter control system. The presence or absence of any visible emissions from the exhaust of the fabric filter control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No.06-02072, issued on January 13, 1988: A.IV.2. 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.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the exhaust of the fabric filter control system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the fabric filter control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-2072, issued on January 13, 1988: A.V.2, A.V.2.a, and A.V.2.b. 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.

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

2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

V. Testing Requirements (continued)

2.b Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

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: Airset Sand Preparation & Mold Make-up (No Bake) (F013)

Activity Description: Sand and binders mixed to form sand molds.

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>
airset sand preparation and mold make-up vented to a baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-4464)	Particulate emissions from the continuous sand mixer and the mold box (while being filled) shall be vented to the baghouse.
		Particulate emissions from the baghouse shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent.
		Total particulate emissions from the baghouse serving emissions units F013, F014, and F015, combined, shall not exceed 16.6 tons per year.
		Total volatile organic compound (VOC) emissions from emissions unit F013 shall not exceed 29.25 tons per year.
		See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08	See A.I.2.c below.
	OAC rule 3745-21-07(G)	
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.
- 2.c This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) per the exemption as described in OAC rule 3745-21-07(G)(9)(i). See A.VI.1 below.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1. 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 No. 06-4464, issued on October 5, 2000: A.III.2 and A.III.3. 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.
- 2. The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the baghouse. The presence or absence of any visible emissions from the exhaust of the fabric filter control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.
- 3. The permittee shall collect and record the tons of sand handled for each day the airset sand preparation and mold make-up emissions unit are in operation.

IV. Reporting Requirements

- 1. 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 No. 06-4464, issued on October 5, 2000: A.IV.2, A.IV.3, and A.IV.4. 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.
- 2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the exhaust of the baghouse during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the fabric filter control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

- 3. The permittee shall submit annual reports which specify the total particulate emissions from emissions units F013, F014, and F015, combined, for the previous calendar year. These reports shall be submitted by April 15 of each year.
- 4. The permittee shall submit annual reports which specify the total VOC emissions from emissions unit F013 for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

1. 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 No. 06-4464, issued on October 5, 2000: A.V.2, A.V.2.a, A.V.2.b, A.V.2.c, A.V.2.d, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

16.6 tons per year of particulate emissions for emissions units F013, F014, and F015, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the results of the most recent stack test (in gr/dscf and cfm) by the hours of operation as follows:

$$[(\text{gr/dscf}) \times (\text{cfm}) \times (60 \text{ min/hr}) / (7000 \text{ gr/lb})] \times (\text{actual hours of operation/yr}) \times (0.0005 \text{ ton/lb}) = \text{tons per year.}$$
 - 2.c Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)
 - 2.d Emission Limitation:

29.25 tons per year of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total tons of sand handled per year by the emission factor of 1.17 lbs of VOC/ton and dividing by 2000.

V. Testing Requirements (continued)

3. 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 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative USEPA-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.
 - e. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

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

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

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

VI. Miscellaneous Requirements

1. This exemption was adopted by the Director of Ohio EPA and became effective in June, 1999. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this rule as a revision to the Ohio SIP for ozone.

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: Airset Casting Shakeout (No Bake) (F014)
Activity Description: Sandy castings pass along vibratory conveyor to shake off 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>
airset casting shakeout vented to a baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-4464)	Particulate emissions from the baghouse shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent.
		Total particulate emissions from the baghouse serving emissions units F013, F014, and F015, combined, shall not exceed 16.6 tons per year.
		Total volatile organic compound (VOC) emissions from emissions unit F014 shall not exceed 7.20 tons per year.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.c below.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions (continued)

- 2.b** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.
- 2.c** This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) per the exemption as described in OAC rule 3745-21-07(G)(9)(i). See A.VI.1 below.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1.** 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 No. 06-4464, issued on October 5, 2000: A.III.2, A.III.3, and 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.
- 2.** The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the baghouse. The presence or absence of any visible emissions from the exhaust of the fabric filter control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.
- 3.** The permittee shall collect and record the tons of sand handled for each day the airset casting shakeout emissions unit are in operation.
- 4.** The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

- 1.** 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 No. 06-4464, issued on October 5, 2000: A.IV.2, A.IV.3, A.IV.4. 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.
- 2.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the exhaust of the baghouse during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the fabric filter control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

- 3.** The permittee shall submit annual reports which specify the total particulate emissions from emissions units F013, F014, and F015, combined, for the previous calendar year. These reports shall be submitted by April 15 of each year.
- 4.** The permittee shall submit annual reports which specify the total VOC emissions from emissions unit F014 for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

1. 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 No. 06-4464, issued on October 5, 2000: A.V.2, A.V.2.a, A.V.2.b, A.V.2.c, A.V.2.d, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

16.6 tons per year of particulate emissions for emissions units F013, F014, and F015, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the results of the most recent stack test (in gr/dscf and cfm) by the hours of operation as follows:

$$[(\text{gr/dscf}) \times (\text{cfm}) \times (60 \text{ min/hr}) / (7000 \text{ gr/lb})] \times (\text{actual hours of operation/yr}) \times (0.0005 \text{ ton/lb}) = \text{tons per year.}$$
 - 2.c Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)
 - 2.d Emission Limitation:

7.20 tons per year of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total tons of sand handled per year by the emission factor of 1.2 lbs of VOC/ton and dividing by 2000.

V. Testing Requirements (continued)

3. 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 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative USEPA-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.
 - e. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

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

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

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

VI. Miscellaneous Requirements

1. This exemption was adopted by the Director of Ohio EPA and became effective in June, 1999. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this rule as a revision to the Ohio SIP for ozone.

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: Airset Pouring & Cooling (No Bake) (F015)
Activity Description: Molten iron poured into sand molds and cooled to form 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>
airset pouring and cooling vented to a baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-4464)	Particulate emissions from the baghouse shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent.
		Total particulate emissions from the baghouse serving emissions units F013, F014, and F015, combined, shall not exceed 16.6 tons per year.
		Total volatile organic compound (VOC) emissions from emissions unit F015 shall not exceed 0.84 ton per year.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.c below.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions (continued)

- 2.b** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.
- 2.c** This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) per the exemption as described in OAC rule 3745-21-07(G)(9)(i). See A.VI.1 below.

II. Operational Restrictions

1. All equipment employed in the airset pouring and cooling operation shall be vented to a fabric filter.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-4464, issued on October 5, 2000: A.III.2, A.III.3, and 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.
2. The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the baghouse. The presence or absence of any visible emissions from the exhaust of the fabric filter control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.
3. The permittee shall collect and record the tons of sand handled for each day the airset pouring and cooling emissions unit are in operation.
4. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. 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 No. 06-4464, issued on October 5, 2000: A.IV.2, A.IV.3, and A.IV.4. 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.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the exhaust of the baghouse during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the fabric filter control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. The permittee shall submit annual reports which specify the total particulate emissions from emissions units F013, F014, and F015, combined, for the previous calendar year. These reports shall be submitted by April 15 of each year.
4. The permittee shall submit annual reports which specify the total VOC emissions from emissions unit F015 for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

1. 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 No. 06-4464, issued on October 5, 2000: A.V.2, A.V.2.a, A.V.2.b, A.V.2.c, A.V.2.d, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

16.6 tons per year of particulate emissions for emissions units F013, F014, and F015, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the results of the most recent stack test (in gr/dscf and cfm) by the hours of operation as follows:

$$[(\text{gr/dscf}) \times (\text{cfm}) \times (60 \text{ min/hr}) / (7000 \text{ gr/lb})] \times (\text{actual hours of operation/yr}) \times (0.0005 \text{ ton/lb}) = \text{tons per year.}$$
 - 2.c Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)
 - 2.d Emission Limitation:

0.84 ton per year of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total tons of sand handled per year by the emission factor of 0.14 lb of VOC/ton and dividing by 2000.

V. Testing Requirements (continued)

3. 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 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative USEPA-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.
 - e. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

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

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

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

VI. Miscellaneous Requirements

1. This exemption was adopted by the Director of Ohio EPA and became effective in June, 1999. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this rule as a revision to the Ohio SIP for ozone.

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: Isocure CB-30 Coremaking Machine (F016)
Activity Description: Sand and binders mixed to form sand molds.

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>
Isocure CB-30 coremaking machine vented to a packed-bed scrubber	OAC rule 3745-31-05(A)(3) (PTI 06-3004)	Particulate emissions from the exhaust of the scrubber shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent.
		Triethylamine emissions from emissions units F016 and F017, combined, shall not exceed 0.05 pound per hour.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.c below
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

2. Additional Terms and Conditions (continued)

- 2.c** This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) per the exemption as described in OAC rule 3745-21-07(G)(9)(h). See A.VI.1 below.
- 2.d** The sand bin shall be controlled with a passive, fabric filter bin vent.

II. Operational Restrictions

- 1.** The static pressure drop across the scrubber shall be maintained within the range of 2 to 5 inches of water.
- 2.** The conductivity of the scrubber liquor shall be maintained within the range of 38 to 115 ms/cm (millisiemens per centimeter).

III. Monitoring and/or Record Keeping Requirements

- 1.** 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 No. 06-3004, issued on January 30, 1991: A.III.2, A.III.3, and 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.
- 2.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the conductivity of the scrubber liquor while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
- 3.** The permittee shall collect and record the following information once per shift during each day the emissions unit is in operation:
 - a. the pressure drop across the scrubber, in inches of water column; and
 - b. the conductivity of the scrubber liquor, in millisiemens per centimeter.
- 4.** The permittee shall perform monthly checks for any visible particulate emissions from the scrubber and bin vent. The presence or absence of any visible emissions from the scrubber and/or bin vent shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

- 1.** 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 No. 06-3004, issued on January 30, 1991: A.IV.2 and 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber parameters were not maintained at the following levels:
 - a. a static pressure drop across the scrubber within the range of 2 to 5 inches of water; and
 - b. conductivity of the scrubber liquor within the range of 38 to 115 ms/cm (millisiemens per centimeter).

The reports shall be submitted by January 31 of each year for the period from July 1 until December 31, and by July 31 of each year for the period from January 1 until June 30.

If no deviations of the above listed operating parameters are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameters were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the scrubber and/or bin vent and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the scrubber and/or bin vent during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the scrubber and/or bin vent during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3004, issued on January 30, 1991: A.V.2, A.V.2.a, A.V.2.b, A.V.2.c, A.V.3, and A.V.4. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

2.b Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

V. Testing Requirements (continued)

2.c Emission Limitation:

0.05 pound per hour of triethylamine from emissions units F016 and F017, combined

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission tests in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 18. No emission testing is specifically required by this permit but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04(A). Emission tests were performed on April 25, 1990 on the scrubber controlling F016 and F017. The results of the tests indicated an emission rate of 0.0013 pound triethylamine per hour.

- 3.** In the event this emissions unit is tested, the permittee shall monitor and record the pressure drop across the scrubber, in inches of water column, and the conductivity of the scrubber liquor, in millisiemens per centimeter, during each run of the emission test.

VI. Miscellaneous Requirements

- 1.** This exemption was adopted by the Director of Ohio EPA and became effective in June, 1999. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this rule as a revision to the Ohio SIP for ozone.

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: Shalco 4-102 Isocure Coremaking Machine (F017)

Activity Description: Sand and binders mixed to form sand molds.

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>
Shalco 4-102 isocure coremaking machine vented to a packed-bed scrubber	OAC rule 3745-31-05(A)(3) (PTI 06-3004)	Particulate emissions from the exhaust of the scrubber shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions, whichever is less stringent.
		Triethylamine emissions from emissions units F016 and F017, combined, shall not exceed 0.05 pound per hour.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.c below.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

2. Additional Terms and Conditions (continued)

- 2.c** This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) per the exemption as described in OAC rule 3745-21-07(G)(9)(h). See A.VI.1 below.
- 2.d** The sand bin shall be controlled with a passive, fabric filter bin vent.

II. Operational Restrictions

- 1.** The static pressure drop across the scrubber shall be maintained within the range of 2 to 5 inches of water.
- 2.** The conductivity of the scrubber liquor shall be maintained within the range of 38 to 115 ms/cm (millisiemens per centimeter).

III. Monitoring and/or Record Keeping Requirements

- 1.** 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 No. 06-3004, issued on January 30, 1991: A.III.2, A.III.3, 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.
- 2.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the conductivity of the scrubber liquor while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
- 3.** The permittee shall collect and record the following information once per shift during each day the emissions unit is in operation:
 - a. the pressure drop across the scrubber, in inches of water column; and
 - b. the conductivity of the scrubber liquor, in millisiemens per centimeter.
- 4.** The permittee shall perform monthly checks for any visible particulate emissions from the scrubber and bin vent. The presence or absence of any visible emissions from the scrubber and/or bin vent shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

- 1.** 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 No. 06-3004, issued on January 30, 1991: A.IV.2 and 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber parameters were not maintained at the following levels:
 - a. a static pressure drop across the scrubber within the range of 2 to 5 inches of water; and
 - b. conductivity of the scrubber liquor within the range of 38 to 115 ms/cm (millisiemens per centimeter).

The reports shall be submitted by January 31 of each year for the period from July 1 until December 31, and by July 31 of each year for the period from January 1 until June 30.

If no deviations of the above listed operating parameters are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameters were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the scrubber and/or bin vent and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the scrubber and/or bin vent during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the scrubber and/or bin vent during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3004, issued on January 30, 1991: A.V.2, A.V.2.a, A.V.2.b, A.V.2.c, A.V.3, and A.V.4. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

2.b Emission Limitation:

no visible particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

V. Testing Requirements (continued)

2.c Emission Limitation:

0.05 pound per hour of triethylamine from emissions units F016 and F017, combined

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emission tests in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 18. No emission testing is specifically required by this permit but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04(A). Emission tests were performed on April 25, 1990 on the scrubber controlling F016 and F017. The results of the tests indicated an emission rate of 0.0013 pound triethylamine per hour.

- 3.** In the event this emissions unit is tested, the permittee shall monitor and record the pressure drop across the scrubber, in inches of water column, and the conductivity of the scrubber liquor, in millisiemens per centimeter, during each run of the emission test.

VI. Miscellaneous Requirements

- 1.** This exemption was adopted by the Director of Ohio EPA and became effective in June, 1999. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this rule as a revision to the Ohio SIP for ozone.

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: Ductile Iron Inoculation (F018)
Activity Description: Molten iron inoculated with magnesium, etc.

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>
ductile iron inoculation vented to a baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-3051)	Particulate emissions from the exhaust of the baghouse shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases, 1.8 lbs/hr, and 3.2 tpy. There shall be no visible fugitive particulate emissions from the inoculation fume hooding and collection system. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	The visible particulate emissions from the baghouse shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-3051, issued on April 24, 1991: A.III.2 and A.III.3. 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.
2. The permittee shall perform monthly* checks for any visible particulate emissions from the exhaust of the fabric filter control system. The presence or absence of any visible emissions from the exhaust of the fabric filter control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

* This emissions unit operates very infrequently, e.g., 24 hours in 2001; therefore, a monthly visible emission check is deemed to be reasonable for this emissions unit.
3. The permittee shall perform daily checks for any visible particulate emissions from the inoculation fume hooding and collection system. The presence or absence of any visible emissions from the inoculation fume hooding and collection system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No. 06-3051, issued on April 24, 1991: A.IV.2. 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.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from either the exhaust of the fabric filter control system or the inoculation fume hooding and collection system and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions are observed from the exhaust of the fabric filter control system or from the inoculation fume hooding and collection system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3051, issued on April 24, 1991: A.V.2, A.V.2.a, A.V.2.b, A.V.2.c, A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

2.a Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases

1.8 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

2.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

2.c Emission Limitation:

no visible particulate emissions from the inoculation fume hooding and collection system

Applicable Compliance Method:

Compliance shall be demonstrated based upon Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of 40 CFR Part 60, Appendix A, Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

2.d Emission Limitation:

3.2 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum iron production rate of 9.25 tons per hour by the particulate emission factor of 4.0 pounds per ton of iron produced, times the control efficiency of the baghouse (1 - .99), times the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton.

The particulate emission factor was obtained from the SCC codes and emission factor listing dated March, 1990.

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 Pouring and Cooling (F019)

Activity Description: Molten iron poured into sand molds and cooled to form 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>
DISA pouring and cooling operation (cooling portion vented to a scrubber)	OAC rule 3745-31-05(A)(3) (PTI 06-3748)	Particulate emissions from the exhaust of the scrubber shall not exceed 0.020 grain per dry standard cubic foot of exhaust gases.
		Total particulate emissions from the scrubber serving emissions units F019, F020, F021, and F022, combined, shall not exceed 18.3 pounds per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

1. The static pressure drop across the scrubber shall be maintained within the range of 5 to 13 inches of water.
2. All equipment employed in the DISA cooling operation shall be vented to a scrubber.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.III.2, A.III.3, and 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.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
3. The permittee shall collect and record the pressure drop across the scrubber, in inches of water column, once per shift during each day the emissions unit is in operation.
4. The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the control system. The presence or absence of any visible emissions from the exhaust of the control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No. 06-3748, issued on June 16, 1993, A.IV.2 and 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.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the static pressure drop across the scrubber was not maintained within the range of 5 to 13 inches of water.

The reports shall be submitted by January 31 of each year for the period from July 1 until December 31, and by July 31 of each year for the period from January 1 until June 30.

If no deviations of the above listed operating parameter are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameter were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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

If no visible particulate emissions are observed from the exhaust of the scrubber control system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the scrubber control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.V.2, A.V.2.a, A.V.2.b, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 2.a Emission Limitation:

0.020 grain of particulate emissions per dry standard cubic foot of exhaust gases

18.3 pounds per hour of particulate emissions from emissions units F019, F020, F021, and F022, combined

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.
3. The permittee shall conduct, or have conducted, emission testing for emissions units F019, F020, F021, and F022 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.
 - e. The permittee shall monitor and record the pressure drop across the scrubber, in inches of water column, during each run of the emission test.
 - f. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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 appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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 Shakeout and Sorting (F020)
Activity Description: Sandy castings pass along vibratory conveyor to shake off 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>
DISA shakeout and sorting vented to a scrubber	OAC rule 3745-31-05(A)(3) (PTI 06-3748)	Particulate emissions from the exhaust of the scrubber shall not exceed 0.020 grain per dry standard cubic foot of exhaust gases.
		Total particulate emissions from the scrubber serving emissions units F019, F020, F021, and F022, combined, shall not exceed 18.3 pounds per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

1. The static pressure drop across the scrubber shall be maintained within the range of 5 to 13 inches of water.
2. All equipment employed in the DISA shakeout and sorting operation shall be vented to a scrubber.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.III.2, A.III.3, 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.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
3. The permittee shall collect and record the pressure drop across the scrubber, in inches of water column, once per shift during each day the emissions unit is in operation.
4. The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the control system. The presence or absence of any visible emissions from the exhaust of the control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.IV.2 and 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.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the static pressure drop across the scrubber was not maintained within the range of 5 to 13 inches of water.

The reports shall be submitted by January 31 of each year for the period from July 1 until December 31, and by July 31 of each year for the period from January 1 until June 30.

If no deviations of the above listed operating parameter are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameter were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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

If no visible particulate emissions are observed from the exhaust of the scrubber control system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the scrubber control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.V.2, A.V.2.a, A.V.2.b, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 2.a Emission Limitation:

0.020 grain of particulate emissions per dry standard cubic foot of exhaust gases

18.3 pounds per hour of particulate emissions from emissions units F019, F020, F021, and F022, combined

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.
3. The permittee shall conduct, or have conducted, emission testing for emissions units F019, F020, F021, and F022 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.
 - e. The permittee shall monitor and record the pressure drop across the scrubber, in inches of water column, during each run of the emission test.
 - f. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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 appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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

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 Casting Cooling (F021)

Activity Description: Molten iron that has been poured into sand molds is cooled to form 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>
DISA casting cooling vented to a scrubber	OAC rule 3745-31-05(A)(3) (PTI 06-3748)	Particulate emissions from the exhaust of the scrubber shall not exceed 0.020 grain per dry standard cubic foot of exhaust gases. Total particulate emissions from the scrubber serving emissions units F019, F020, F021, and F022, combined, shall not exceed 18.3 pounds per hour. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

1. The static pressure drop across the scrubber shall be maintained within the range of 5 to 13 inches of water.
2. All equipment employed in the DISA casting cooling operation shall be vented to a scrubber.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.III.2, A.III.3, and 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.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
3. The permittee shall collect and record the pressure drop across the scrubber, in inches of water column, once per shift during each day the emissions unit is in operation.
4. The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the control system. The presence or absence of any visible emissions from the exhaust of the control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.IV.2 and 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.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the static pressure drop across the scrubber was not maintained within the range of 5 to 13 inches of water.

The reports shall be submitted by January 31 of each year for the period from July 1 until December 31, and by July 31 of each year for the period from January 1 until June 30.

If no deviations of the above listed operating parameter are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameter were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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

If no visible particulate emissions are observed from the exhaust of the scrubber control system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the scrubber control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.V.2, A.V.2.a, A.V.2.b, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 2.a Emission Limitation:

0.020 grain of particulate emissions per dry standard cubic foot of exhaust gases

18.3 pounds per hour of particulate emissions from emissions units F019, F020, F021, and F022, combined

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.
3. The permittee shall conduct, or have conducted, emission testing for emissions units F019, F020, F021, and F022 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.
 - e. The permittee shall monitor and record the pressure drop across the scrubber, in inches of water column, during each run of the emission test.
 - f. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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 appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: DISA Sand Preparation and Mold Make-up (F022)

Activity Description: Sand and binders mixed to form sand molds.

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>
DISA sand preparation and mold make-up vented to a scrubber	OAC rule 3745-31-05(A)(3) (PTI 06-3748)	Particulate emissions from the exhaust of the scrubber shall not exceed 0.020 grain per dry standard cubic foot of exhaust gases.
		Total particulate emissions from the scrubber serving emissions units F019, F020, F021, and F022, combined, shall not exceed 18.3 pounds per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

1. The static pressure drop across the scrubber shall be maintained within the range of 5 to 13 inches of water.
2. All equipment employed in the DISA sand preparation and mold make-up operation shall be vented to a scrubber.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.III.2, A.III.3, and 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.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
3. The permittee shall collect and record the pressure drop across the scrubber, in inches of water column, once per shift during each day the emissions unit is in operation.
4. The permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the control system. The presence or absence of any visible emissions from the exhaust of the control system shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.IV.2 and 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.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the static pressure drop across the scrubber was not maintained within the range of 5 to 13 inches of water.

The reports shall be submitted by January 31 of each year for the period from July 1 until December 31, and by July 31 of each year for the period from January 1 until June 30.

If no deviations of the above listed operating parameter are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameter were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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

If no visible particulate emissions are observed from the exhaust of the scrubber control system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the scrubber control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-3748, issued on June 16, 1993: A.V.2, A.V.2.a, A.V.2.b, A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 2.a Emission Limitation:

0.020 grain of particulate emissions per dry standard cubic foot of exhaust gases

18.3 pounds per hour of particulate emissions from emissions units F019, F020, F021, and F022, combined

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.
 - 2.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.
3. The permittee shall conduct, or have conducted, emission testing for emissions units F019, F020, F021, and F022 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 1 year prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.
 - e. The permittee shall monitor and record the pressure drop across the scrubber, in inches of water column, during each run of the emission test.
 - f. During each test run, the permittee shall perform visible emission readings in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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 appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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: Pedestal Grinders (F025)
Activity Description: Finishing grinders smooth rough casting edges.

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>
pedestal grinders vented to a baghouse	OAC rule 3745-17-11	Particulate emissions from the baghouse shall not exceed 15.7 lbs/hr, based upon Figure II.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 daily 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 semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

1.a Emission Limitation:

15.7 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit, but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04(A).

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: Rotoblast #1, #2, #3 (F026)
Activity Description: Sandy castings are cleaned.

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>
rotoblast #1, #2, and #3 vented to a baghouse	OAC rule 3745-17-11	Particulate emissions from the baghouse shall not exceed 17.9 lbs/hr, based upon Figure II.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 daily 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 semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

1.a Emission Limitation:

17.9 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit, but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04(A).

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: Unit 3 Mold Sand Preparation and Mold Making (F027)
Activity Description: Sand and binders mixed to form sand molds.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mold sand preparation and mold make-up unit #3 vented to a wet scrubber	OAC rule 3745-17-11(B)	Particulate emissions from the conveyor/elevator system, rotary screen, 100 ton sand bin, sand muller, and sand bins shall be vented to the wet scrubber.
	OAC rule 3745-17-07(A)	Particulate emissions from the wet scrubber shall not exceed 18.6 lbs/hr, based upon Figure II. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

* This emissions unit operates very infrequently, e.g., 268 hours in 2001 and 284 hours in 2002; therefore, a monthly visible emission check is deemed to be reasonable for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

1.a Emission Limitation:

18.6 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

Facility Name: **Burnham Foundry**
Facility ID: **06-60-01-0101**
Emissions Unit: **Unit 3 Mold Sand Preparation and Mold Making (F02)**

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: Monorail Casting Cleaning (P014)

Activity Description: Sandy castings are cleaned.

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>
monorail cleaning machine vented to a baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-06546)	Particulate emissions from the exhaust of the baghouse shall not exceed 2.62 pounds per hour or there shall be no visible particulate emissions, whichever is less stringent.
		Total particulate emissions shall not exceed 9.93 tons per year.
		See A.I.2.c below.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

2. Additional Terms and Conditions (continued)

- 2.c** The permittee shall employ best available control measures that include the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control the fugitive dust from this emissions unit. Such equipment shall have a collection efficiency sufficient to eliminate visible particulate emissions of fugitive dust at the points of capture to the extent possible with good engineering design.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.
2. The maximum annual production rate for this emissions unit is 151,615 tons of castings cleaned per year, based on current production limitations, which can't be exceeded because it is well above the allowable iron melt rate for the cupola.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-06546, issued on October 18, 2001: A.III.2 and A.III.3. 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.
2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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.
3. The permittee shall perform weekly checks for any visible particulate emissions from the baghouse. The presence or absence of any visible emissions from the baghouse shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

IV. Reporting Requirements

1. 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 No. 06-06546, issued on October 18, 2001: A.IV.2 and 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.
2. The permittee shall submit semiannual written reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the range specified in section A.II.1.

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

If no deviations are observed during a given period, the permittee shall submit a report which states that no deviations of the above listed operating parameters were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

IV. Reporting Requirements (continued)

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

If no visible particulate emissions are observed from the exhaust of the fabric filter control system during a given period, the permittee shall submit a report which states that no visible particulate emissions were observed from the exhaust of the fabric filter control system during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

V. Testing Requirements

1. 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 No. 06-06546, issued on October 18, 2001: A.V.2, A.V.2.a, A.V.2.b, and A.V.2.c. 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.

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

2.a Emission Limitation:

2.62 pounds per hour of particulate emissions

Acceptable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5. No testing is specifically required to demonstrate compliance with this emission limitation but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

2.b Emission Limitation:

no visible particulate emissions

Acceptable Compliance Method:

Compliance shall be demonstrated using Test Method 22-like visible emission observations. Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.

2.c Emission Limitation:

9.93 tons per year of particulate emissions

Acceptable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum possible annual production rate of 151,615 tons of castings times the emission factor of 0.131 lb/ton of castings (as derived from the company's last emission test for this emissions unit), and then dividing by 2000 lbs/ton.

VI. Miscellaneous Requirements

1. The requirements of PTI 06-06546 supersede the requirements pertaining to this emissions unit as established in PTI 06-788 issued on October 13, 1981.

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: #9 Gray Iron Cupola (P905)
Activity Description: Scrap iron melted down in cupola.

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>
#9 gray iron cupola employed to melt foundry returns, scrap metal, and fluxes with emissions vented to an afterburner and wet scrubber	OAC rule 3745-31-05(A)(3) (PTI 06-06692)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
		Organic compounds (OC) emissions from the wet scrubber shall not exceed 4.14 pounds per hour.
		Nitrogen oxides (NOx) emissions from the wet scrubber shall not exceed 2.3 pounds per hour.
		Sulfur dioxide (SO ₂) emissions from the wet scrubber shall not exceed 3.13 pounds per hour.
		Particulate emissions from the wet scrubber shall not exceed 23.69 pounds per hour from the stack.
		Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
		During those times when the cupola is not being charged, the charge door to the cupola shall remain closed to minimize or eliminate visible emissions.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-06(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).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-21-08(D)	See A.I.2.a below.
	OAC rule 3745-31-05(D)	OC emissions shall not exceed 5.13 tons per rolling, 12-month period.
		NOx emissions shall not exceed 2.85 tons per rolling, 12-month period.
		SO2 emissions shall not exceed 3.89 tons per rolling, 12-month period.
		Particulate emissions shall not exceed 29.36 tons per rolling, 12-month period from the stack.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08	See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a** The direct flame afterburner or equivalent device shall be installed and operated at all times the cupola is in operation. For purposes of this requirement, operation of the cupola shall not include idle periods when no combustion air is injected into the cupola.
- 2.b** This emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive particulate emissions from this emissions unit.

II. Operational Restrictions

- 1.** The static pressure drop across the scrubber shall be greater than or equal to 46.0 inches of water.
- 2.** The pH of the scrubber liquor shall be maintained within the range of 5.5 to 9.0.
- 3.** Emissions unit gases shall be burned at 1300 degrees Fahrenheit in a direct flame afterburner or equivalent device, designed for a minimum of 0.3 second residence time. This operational restriction shall not apply to idle periods when no combustion air is injected into the cupola.
- 4.** The maximum annual production rate for this emissions unit shall not exceed 57,000 tons of metal charged in any rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. 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 No. 06-06692, issued on February 19, 2002: A.III.2, A.III.3, A.III.4, A.III.5, A.III.6, and A.III.7. 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.
2. The permittee shall maintain monthly records of the following:
 - a. the total weight of metal charged (in tons) in this emissions unit;
 - b. the total weight of metal charged (in tons) in this emissions unit during the rolling, 12-month period; and
 - c. the OC, NO_x, SO₂, and particulate emission rates for the rolling, 12-month period, calculated using the following equations:

For OC, NO_x, and PE:

$$E = M \times EF / 2000 \text{ lbs/ton}$$

where:

E = the emission rate, in tons per rolling, 12-month period;
M = the metal charge rate during the rolling, 12-month period; and
EF = the emission factor for OC, NO_x, or particulates.

OC emission factor = 0.18 lb/ton of metal charged;
NO_x emission factor = 0.10 lb/ton of metal charged; and
particulate emission factor = 1.03 lbs/ton of metal charged.

For SO₂:

$$E1 = M \times EF / 2000 \text{ lbs/ton}$$

where:

E1 = the uncontrolled emission rate, in tons per rolling, 12-month period;
M = the metal charge rate during the rolling, 12-month period; and
EF = the emission factor for SO₂.

SO₂ emission factor = 1.25 lbs/ton of metal charged.

$E2 = E1 \times 0.99$ = the SO₂ captured and vented to control equipment.

$E3 = E2 \times (1 - 0.90)$ = the SO₂ exiting the control equipment.

$E4 = E1 \times (1 - 0.99)$ = the SO₂ not captured.

Total SO₂ emissions = E3 + E4.

The emission factors for OC, NO_x, and SO₂ were obtained from FIRE version 6.23 for SCC 3-04-003-01 (gray iron cupola). The particulate emission factor was provided by the company and was obtained during a 1996 stack test.

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

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber, the pH of the scrubber liquor, and the afterburner temperature while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
4. The permittee shall collect and record the following information once per shift during each day the emissions unit is in operation:
 - a. the static pressure drop across the scrubber, in inches of water column;
 - b. the pH of the scrubber liquor; and
 - c. the total hours of cupola operation.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and 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 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. 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 daily 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.

6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the direct flame afterburner when the emissions unit is in operation (excluding idle periods when no combustion air is injected into the cupola). Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The continuous recorder shall be installed within 3 months after the effective date of this permit. Prior to the installation of the continuous recorder, the permittee shall record the temperature once during each shift.

After installation of the continuous recorder, the permittee shall record each day each period of time during which the combustion temperature within the direct flame afterburner, when the emissions unit was in operation, was less than 1300 degrees Fahrenheit.

IV. Reporting Requirements

1. 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 No. 06-06692, issued on February 19, 2002: A.IV.2, A.IV.3, A.IV.4, A.IV.5, and A.IV.6. 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.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber parameters were not maintained at the following levels:
 - a. a static pressure drop across the scrubber of greater than or equal to 46.0 inches of water; and
 - b. a pH of the scrubber liquor within the range of 5.5 to 9.0.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month total metal charged limitation.

The permittee shall submit quarterly deviation (excursion) reports that identify each month during which any OC, NOx, CO, and/or particulate emission rate exceeded the limit specified in section A.I.1, in ton(s) per rolling, 12-month period.
4. If no deviations are observed during a given period, the permittee shall submit a report which states that no deviations were observed during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) 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 (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
6. The permittee shall submit quarterly deviation (excursion) reports that identify each period of time during which the combustion temperature within the direct flame afterburner did not comply with the temperature limitation specified above.

V. Testing Requirements

1. 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 No. 06-06692, issued on February 19, 2002: A.V.2, A.V.2.a through A.V.2.j, and A.V.3. 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.
2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 2.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit, but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04 (A).

V. Testing Requirements (continued)

2.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the requirements specified in OAC rule 3745-17-03(B)(3) and the methods and procedures required in 40 CFR Part 60, Appendix A, Method 9. No visible emission testing is specifically required by this permit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04 (A).

2.c Emission Limitation:

23.69 pounds per hour of particulate emissions (stack only)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements specified in section A.V.3.

2.d Emission Limitation:

29.36 tons of particulates per rolling, 12-month period from the stack

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.2.

2.e Emission Limitation:

4.14 pounds per hour of OC

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, 25, or 25A, as appropriate.

2.f Emission Limitation:

5.13 tons of OC per rolling, 12-month period

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.2.

2.g Emission Limitation:

2.3 pounds per hour of NO_x

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 7.

V. Testing Requirements (continued)

2.h Emission Limitation:

2.85 tons of NO_x per rolling, 12-month period

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.2.

2.i Emission Limitation:

3.13 lbs/hr of SO₂

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6.

2.j Emission Limitation:

3.89 tons of SO₂ per rolling, 12-month period

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.2.

3. 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 1 year prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative USEPA-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 of 23.0 tons of metal charged per hour.

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 Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Southeast District Office's refusal to accept the results of the emission test(s).

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

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

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 Standby Generator (Z001)

Activity Description: Disa Standby Generator generates electricity for use during power outages.

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>
DISA standby generator	OAC rule 3745-17-07	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions shall not exceed 0.25 lb/mmBtu of actual heat input (See section A.I.2.a below.) Particulate emissions shall not exceed 0.310 lb/mmBtu of actual heat input (See section A.I.2.b below.)
	OAC rule 3745-31-05(A)(3) (PTI 06-4752)	Emissions from this emissions unit are limited to the following: 2.83 tpy of PM10 0.82 tpy of organic compounds (OC) 9.21 tpy of sulfur dioxide (SO2) 28.27 tpy of nitrogen oxides (NOx) 7.38 tpy of carbon monoxide (CO) See A.II.1 below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 and 3745-17-11.

2. Additional Terms and Conditions

- 2.a The requirement to comply with this particulate emissions limitation shall terminate on the date the U.S. EPA approves the 0.310 lb of particulate emissions/mmBtu of actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.

2. Additional Terms and Conditions (continued)

- 2.b** This particulate emissions limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emissions limitation as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. The permittee shall not operate this emissions unit for more than 4,000 hours during any rolling, 12-month period.
2. The permittee shall burn only no. 2 fuel oil as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform monthly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.
3. The permittee shall maintain records of the monthly hours of operation and the hours of operation, as a rolling, 12-month summation.
4. For each day during which the permittee burns a fuel other than no. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit deviation (excursion) reports of any record which shows that the hours of operation exceeded 4000 hours based on a rolling, 12-month summation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southeast District Office within 45 days after the end of the month during which the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than no. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitations and operational restriction in sections A.I.1 and A.II.1 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:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required by this permit but, if appropriate, it may be requested pursuant to OAC rule 3745-15-04(A).

1.b Operational Restriction:

4,000 hours of operation as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirement specified in section A.III.3.

1.c Emission Limitations:

2.83 tpy of PM10

0.82 tpy of OC

9.21 tpy of SO₂

28.27 tpy of NO_x

7.38 tpy of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the annual hours of operation times the appropriate emission factors found in AP-42, Table 3.4-2 and AP-42, Table 3.4-5.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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