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

01/09/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

02-47-04-0014
Elyria Foundry
John Byrne
120 Filbert Street
Elyria, OH 44036

Dear John Byrne:

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 Northeast District Office.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
File, DAPC PMU

State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **01/09/02**	Effective Date: **01/09/02**	Expiration Date: **01/09/07**

This document constitutes issuance of a Title V permit for Facility ID: 02-47-04-0014 to:
Elyria Foundry
120 Filbert Street
Elyria, OH 44036

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

F001 (Furnace #1)
Electric melting of steel/iron to produce molten metal.

F002 (Furnace #2)
Electric melting of steel/iron to produce molten metal.

F003 (Furnace #3)
Electric melting of steel/iron to produce molten metal.

F004 (Furnace #4)
Electric melting of steel/iron to produce molten metal.

F005 (#1 Core Dept. Mixer- Castech)
Sand/binder mixing process.

F006 (#2 Core Dept. Mixer- C. E. Cast)
Sand/binder mixing process.

F007 (No. 3 Iron Innoculation)
Large ductile iron castings back-up.

F009 (CL Blow-off Station)
Air lancing to pneumatically discharge core from casting.

F010 (Casting Cooling)
Iron pouring and sand mold cooling equipment with baghouse.

F011 (Grinding/Cleaning)
Iron casting cleaning & finishing line.

F012 (Pouring #1)
Foundry #1 pouring.

F013 (Pouring #2)
Foundry #2 pouring.

F014 (Pouring #3)
Foundry #3 pouring.

F015 (#3 Core Dept. Mixer- Kloster)
Sand/binder mixing process.

F016 (#2 Core Dept. Mixer- Palmer)
Sand/binder mixing process.

F017 (#1 Core Dept. Mixer- Sand Master)
Sand/binder mixing process.

F018 (#1 Core Dept. Mixer- Palmer)
Sand/binder mixing process.

F019 (#6 (North) holding furnace - new foundry.)
Holding and pouring of molten metal.

F020 (#5 (South) holding furnace - new foundry.)
Holding and pouring of molten metal.

F021 (Foundry #2 Self-managed Mixer)
Sand/binder mixing process

F022 (#2 Core Dept Palmer M200 Sand Mixer)
Sand/binder mixing process

F023 (#1 Foundry CE 2000 #/hr. Sand Mixer)
Sand/binder mixing process

K002 (Paint Booth)
Application of coatings onto castings.

P004 (Shot Blast 6 ft.)
Surface cleaning of castings.

P005 (Shot Blast 8 ft.)
Shot blast cleaning of castings.

P006 (Vac-Blast)
Grit blasting cabinet.

P007 (Cut-off Saw)
Abrasive wheel cut-off for gates and risors from castings.

P008 (N. Plant Reclamation)
Pneumatic cleaning of castings and sand reclamation.

P010 (Scrap Dryer)
Drying of scrap iron and steel.

P017 (Meltshop Innoculation)
Ductile iron processing.

P023 (Shakeout #1)
Shakeout/separation of sand and castings.

P024 (Shakeout #2)
Shakeout/separation of sand and castings.

P026 (Shakeout #3)
Shakeout/separation of sand and castings.

P027 (MS Sand Reclaimer)
South plant mechanical reclaimer.

P028 (T Reclamation System)
South plant thermal reclaimer.

P029 (Core and mold wash operations)
Core/Mold wash operations.

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 3745-77-04(A) 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 Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping 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.

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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
iii. Written reports, which identify any deviations from the federally enforceable <u>monitoring, recordkeeping, and reporting requirements</u> 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. 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, recordkeeping, 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.

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 are true, accurate, and complete.

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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

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.

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.

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.

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. 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.

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.

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.

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.

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 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.

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.

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 appropriate Ohio EPA District Office or local air agency 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.

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.

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).

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.

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, 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; and

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 further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

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.

18. Insignificant Activity

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

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. 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.)

3. 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.

4. 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.

5. 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).

6. 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.

7. 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.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

P011-heat treat furnace
P014-#1 core room sand silo
P015-#2 core room sand silo
P016-#3 core room sand silo
T001-resin storage tank

Each insiginificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions 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: Furnace #1 (F001)

Activity Description: Electric melting of steel/iron to produce molten metal.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Electric induction furnace #1, with maximum melt rate of 3.5 TPH	OAC rule 3745-31-05(A)(3) PTI 02-12455	Particulate emissions shall not exceed 5.25 lbs/hr and 8.25 tons per rolling 12-month period. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 11,000 tons of metal, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation for this emissions unit.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: 5.25 pounds per hour of particulate emissions

Applicable Compliance Method: To determine the actual worst case emission rate for particulate emissions, the following equation shall be used:

E = maximum iron produced (tons per hour) X 1.5 (lbs/ton)

where:

E = particulate emissions (lbs/hr)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

2. Emission Limitation: 8.25 tons per year of particulate emissions

Applicable Compliance Method: To determine the actual emission rate for particulate emissions, the following equation shall be used:

E = iron produced (tons) per rolling 12-month period X 1.5 (lbs/ton) X 1/2000 (ton/lbs)

where:

E = particulate emissions (tons/month)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

3. Emission Limitation: Visible emissions not to exceed 20% opacity as a three-minute average

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(3).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Furnace #2 (F002)

Activity Description: Electric melting of steel/iron to produce molten metal.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Electric induction furnace #2, with maximum melt rate of 3.5 TPH	OAC rule 3745-31-05(A)(3) PTI 02-12455	Particulate emissions shall not exceed 5.25 lbs/hr and 8.25 tons per rolling 12-month period. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 11,000 tons of metal, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation for this emissions unit.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: 5.25 pounds per hour of particulate emissions

Applicable Compliance Method: To determine the actual worst case emission rate for particulate emissions, the following equation shall be used:

E = maximum iron produced (tons per hour) X 1.5 (lbs/ton)

where:

E = particulate emissions (lbs/hr)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

2. Emission Limitation: 8.25 tons per year of particulate emissions

Applicable Compliance Method: To determine the actual emission rate for particulate matter, the following equation shall be used:

E = iron produced (tons) per rolling 12-month period X 1.5 (lbs/ton) X 1/2000 (ton/lbs)

where:

E = particulate emissions (tons/month)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

3. Emission Limitation: Visible emissions not to exceed 20% opacity as a three-minute average

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(3).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Furnace #3 (F003)

Activity Description: Electric melting of steel/iron to produce molten metal.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Electric induction furnace #3, with maximum melt rate of 3.5 TPH	OAC rule 3745-31-05(A)(3) PTI 02-12455	Particulate emissions shall not exceed 5.25 lbs/hr and 8.25 tons per rolling 12-month period. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 11,000 tons of metal, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation for this emissions unit.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: 5.25 pounds per hour of particulate emissions

Applicable Compliance Method: To determine the actual worst case emission rate for particulate emissions, the following equation shall be used:

E = maximum iron produced (tons per hour) X 1.5 (lbs/ton)

where:

E = particulate emissions (lbs/hr)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

2. Emission Limitation: 8.25 tons per year of particulate emissions

Applicable Compliance Method: To determine the actual emission rate for particulate emissions, the following equation shall be used:

E = iron produced (tons) per rolling 12-month period X 1.5 (lbs/ton) X 1/2000 (ton/lbs)

where:

E = particulate emissions (tons/month)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

3. Emission Limitation: Visible emissions not to exceed 20% opacity as a three-minute average

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(3).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Furnace #4 (F004)

Activity Description: Electric melting of steel/iron to produce molten metal.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Electric induction furnace #4, with maximum melt rate of 3.5 TPH	OAC rule 3745-31-05(A)(3) PTI 02-12455	Particulate emissions shall not exceed 5.25 lbs/hr and 8.25 tons per rolling 12-month period. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 11,000 tons of metal, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation for this emissions unit.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: 5.25 pounds per hour of particulate emissions

Applicable Compliance Method: To determine the actual worst case emission rate for particulate matter, the following equation shall be used:

E = maximum iron produced (tons per hour) X 1.5 (lbs/ton)

where:

E = particulate emissions (lbs/hr)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

2. Emission Limitation: 8.25 tons per year of particulate emissions

Applicable Compliance Method: To determine the actual emission rate for particulate emissions, the following equation shall be used:

E = iron produced (tons) per rolling 12-month period X 1.5 (lbs/ton) X 1/2000 (ton/lbs)

where:

E = particulate emissions (tons/month)
1.5 = emission factor in lbs particulate matter per ton iron produced (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for electric induction furnace melting, charging and tapping)

3. Emission Limitation: Visible emissions not to exceed 20% opacity as a three-minute average

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(3).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #1 Core Dept. Mixer- Castech (F005)

Activity Description: Sand/binder mixing process.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand/binder mixer	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day this emissions unit operates:

a. The company identification of the liquid organic materials used.

b. The amounts (pounds) of liquid organic materials and sand mixed.

c. The number of hours of operation.

d. An estimate of the daily organic compound emission rate (pounds), using an emission factor of 1.17 lbs OC per ton of sand.

e. An estimate of the average hourly organic compound emission rate (pounds).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Emission Limitation: 40 pounds of organic compounds per day

Applicable Compliance Method:
To determine the actual emission rate for organic compounds, the following equation shall be used:

Ed = sand usage rate (in tons per day) X 1.17 lbs/ton sand

where

Ed = organic compound emission rate (lbs/day)

1.17 = emission factor (lbs OC per ton of sand) for phenolic urethane no-bake binder system, from Ohio Cast Metal Association study

2. Emission Limitation: 8 pounds of organic compounds per hour

Applicable Compliance Method:
To determine the actual average emission rate for organic compounds, the following equation shall be used:

Eh = Ed / H

where

Eh = average organic compound emission rate (lbs/hr)

Ed = daily organic compound emission rate, determined in A.V.1.

H = hours of operation each day

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #2 Core Dept. Mixer- C. E. Cast (F006)

Activity Description: Sand/binder mixing process.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand/binder mixer	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).
	OAC rule 3745-31-05(A)(3) PTI 02-10900	Particulate emissions shall not exceed 1.7 lbs per hour Visible particulate emissions shall not exceed 20% opacity, as a three-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day this emissions unit operates:

a. The company identification of the liquid organic materials used.

b. The amounts (pounds) of liquid organic materials and sand mixed.

c. The number of hours of operation.

d. An estimate of the daily organic compound emission rate (pounds), using an emission factor of 0.51 lb OC per ton of sand.

e. An estimate of the average hourly organic compound emission rate (pounds).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: 40 pounds of organic compounds per day

Applicable Compliance Method:
To determine the actual emission rate for organic compounds, the following equation shall be used:

Ed = sand usage rate (in tons per day) X 0.51

where

Ed = organic compound emission rate (lbs/day)

0.51 = emission factor (lb organic compounds per ton of sand) for furan no-bake binder system (based on information provided by resin manufacturer)

V. Testing Requirements (continued)

2. Emission Limitation: 8 pounds of organic compounds per hour

Applicable Compliance Method:
To determine the average actual emission rate for organic compounds, the following equation shall be used:

Eh = Ed/H

where

Eh = average organic compound emission rate (lbs/hr)

Ed = organic compound emission rate (lbs/day), determined in A.V.1.

H = hours of operation per day

3. Emission Limitation: Particulate emission shall not exceed 1.7 pounds per hour.

Applicable Compliance Method: Compliance with the emissions limit shall be determined in accordance with the following equation:

E = Ti x 1.1 pounds of particulate emissions per ton of iron

where
E = lbs particulate emissions emitted per hour

Ti = tons of iron produced per hour

1.1 lbs PE/ton iron is the emission factor from AP-42 Table 12.10-7.

Tons of iron produced can be estimated from hourly sand throughput multiplied by the ratio of iron to sand.

4. Emissions Limitation: Visible particulate emissions shall not exceed 20% opacity, as a three-minute average

Applicable Compliance Method: Compliance with the visible emission limit shall be determined in accordance with 40 CFR, Part 60, Appendix A, Method 9.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: No. 3 Iron Innoculation (F007)

Activity Description: Large ductile iron castings back-up.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Large ductile iron castings station, with emissions controlled by a fabric filter (baghouse #15)	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05 (A)(3) PTI 02-5515	Particulate emissions from the baghouse shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases and 4.21 pounds per hour. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

2. The baghouse used to control particulate emissions from this emissions unit (baghouse #15) also controls particulate emissions from the #2 shakeout (P024). This emissions unit shall not operate at the same time that emissions unit P024 is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

2. The permittee shall maintain daily records on the periods of time that this emissions unit and emissions unit P024 are in operation.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time that this emissions unit was in operation at the same time that emissions unit P024 (#2 shakeout) was in operation.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method: If required by the Ohio EPA, compliance with the visible emission limitation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s): Method 9 of 40 CFR Part 60, Appendix A.

2. Emission testing requirements

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 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.

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

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 Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 Northeast District Office within 30 days following completion of the test(s).

V. Testing Requirements (continued)

3. Compliance with the particulate emission limitation of 0.01 grain per dry standard cubic foot of exhaust gases shall be determined in accordance with OAC rule 3745-17-03(B)(10). Emission testing in accordance with section A.V.2. of this permit shall be done to demonstrate compliance with this emission limitation.

4. Compliance with the particulate emission limitation of 4.21 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10). Emission testing in accordance with section A.V.2. of this permit shall be done to demonstrate compliance with this emission limitation.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: CL Blow-off Station (F009)

Activity Description: Air lancing to pneumatically discharge core from casting.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Air lancing to pneumatically discharge sand from cores, controlled by a fabric filter (baghouse #5)	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05(A)(3) PTI 02-5515	Particulate emissions from the baghouse shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases and 1.11 lbs/hr. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method: If required by the Ohio EPA, compliance shall be determined in accordance with the following method(s): Method 9 of 40 CFR Part 60, Appendix A.

2. Emission Limitation: 0.01 grain per dry standard cubic foot of particulate emissions

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

3. Emission Limitation: 1.11 pounds per hour of particulate emissions

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Casting Cooling (F010)

Activity Description: Iron pouring and sand mold cooling equipment with baghouse.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Moldmaking, iron pouring and cooling, controlled by a fabric filter (baghouse #11)	OAC rule 3745-31-05(A)(3) PTI 02-8154	Particulate emissions from the baghouse exhaust which has a pick-up hood at each of the following operations: moldmaking, iron pouring and iron cooling operations, shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases, 3.0 pounds per hour and 7.2 tons per rolling 12-month period. Visible particulate emissions from the baghouse shall not exceed 10% opacity as a 6-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07. See A.I.2.b and c.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11	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 3745-21-07(G)(2)	See A.I.2.a.
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.

2. Additional Terms and Conditions

2.a The emissions unit shall not employ organic liquids which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

2.b The collection efficiency of the air pollution capture hoods shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture. The visible particulate emissions of fugitive dust shall not exceed 20% opacity as a three-minute average.

2.c Each piece of equipment that is part of this emissions unit and has particulate emissions shall be vented to the baghouse serving this emissions unit in accordance with paragraph A.I.2.b.

II. Operational Restrictions

1. The maximum hourly production rate for this emissions unit shall not exceed 5.25 tons of iron poured.

2. The maximum annual production rate for this emissions unit shall not exceed 21,000 tons of iron, based upon a rolling, 12-month summation of the production rates.

3. The maximum annual operating hours for this emissions unit shall not exceed 4800, based upon a rolling, 12-month summation of the operating hours.

4. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

5. During the initial compliance test on February 17, 1995, the maximum hourly production rate achieved was 6400 pounds of iron poured. This represents 60% of the line's maximum capacity.

Therefore, the maximum casting production rate shall not exceed 6400 pounds (3.2 tons) per hour and 15,360 tons per rolling 12- month period, unless compliance is demonstrated at a higher production rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

c. The operating hours for each month.

d. The rolling, 12-month summation of the operating hours.

2. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

3. The permittee shall keep the following records on all materials used in this emissions unit:

a. The identification of each chemical compound and its physical state.

b. For any liquid organic materials, whether or not each material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

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

4. 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 building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify:

a. All exceedances of the rolling, 12-month operating hours limitation.

b. All exceedances of the rolling, 12-month production rate limitation.

c. An identification of each day during which photochemically reactive materials were employed.

2. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(1).

2. Emission Limitation: 0.01 gr/dscf and 3.0 pounds/hour of particulate emissions

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).

3. Emission Limitation: 7.2 tons of particulate emissions per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by using the following equation:

TPY = (ER x H)/2000 where,

TPY = tons of particulate emissions per rolling 12-month period

ER = the hourly emission rate from the last emission test that demonstrated compliance for the emissions unit

H = hours of operation for the rolling 12-month period

2000 = conversion factor (pounds per ton)

V. Testing Requirements (continued)

4. Emission testing requirements

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 no later than 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted for all stacks while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 Northeast District Office within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

1. Prior to increasing hourly production rate from 3.2 tons per hour to 5.25 tons per hour, Elyria Foundry shall demonstrate compliance with the allowable emission rate for particulate emissions through additional emission testing.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Grinding/Cleaning (F011)

Activity Description: Iron casting cleaning & finishing line.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Shakeout table, shotblast, surface grinders, sand handling equipment and sand preparation equipment, controlled by a fabric filter (baghouse #9-10)	OAC rule 3745-31-05(A)(3) PTI 02-8154	Particulate emissions from the baghouse exhaust, which has pick-up hoods at the shakeout table, shotblast, surface grinders, sand handling equipment, and sand preparation equipment, shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases, 3.0 pounds per hour and 7.2 tons per rolling 12-month period. Visible particulate emissions from the baghouse shall not exceed 10% opacity as a 6-minute average. See A.I.2.a and b.
	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).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within and an Appendix A area.

2. Additional Terms and Conditions

2.a The collection efficiency of the air pollution capture hoods shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design. The visible particulate emissions of fugitive dust shall not exceed 20% opacity as a three-minute average.

2.b Each piece of equipment that is part of this emissions unit and has particulate emissions shall be vented to the baghouse serving this emissions unit in accordance with paragraph A.I.2.a.

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 4800, based upon a rolling, 12-month summation of the operating hours.

2. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

3. During the initial compliance test on February 17, 1995, the maximum hourly production rate through the shakeout was 44,000 pounds of iron and sand. This represents 60% of the line's maximum capacity.

Therefore, the maximum hourly production rate through the shakeout shall not exceed 44,000 pounds (22 tons) per hour unless compliance is demonstrated at a higher production rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:

a. The operating hours for each month.

b. The rolling, 12-month summation of the operating hours.

c. The total tons of iron and sand processed through the shakeout.

d. The average hourly tons of iron and sand processed through the shakeout.

2. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify:

a. all exceedances of the rolling, 12-month operating hours limitation;

b. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above; and

c. all exceedances of the hourly production rate.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(1).

2. Emission Limitation: 0.01 gr/dscf and 3.0 pounds/hour of particulate emissions.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).

3. Emission Limitation: 7.2 tons of particulate emissions per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by using the following equation:

TPY = (ER x H)/2000 where,

TPY = tons of particulate emissions per rolling 12-month period

ER = the hourly emission rate from the last emission test that demonstrated compliance for the emissions unit

H = hours of operation for the rolling 12-month period

2000 = conversion factor (pounds per ton)

4. Emission testing requirements

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 no later than 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted for all stacks while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or by the Ohio EPA Northeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 Northeast District Office within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

1. Prior to increasing the hourly production rate from 22 tons per hour, Elyria Foundry shall demonstrate compliance with the allowable emission rate for particulate emissions through additional emission testing. An intent to test notification form shall be sent to the Ohio EPA, Northeast District Office thirty days prior to the test date. This increase in production rate shall not cause an increase in the allowable emission rate for particulate matter.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Pouring #1 (F012)

Activity Description: Foundry #1 pouring.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Foundry #1: pouring and cooling	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Pouring #2 (F013)

Activity Description: Foundry #2 pouring.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Foundry #2: pouring and cooling	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Pouring #3 (F014)

Activity Description: Foundry #3 pouring.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Foundry #3: pouring and cooling	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #3 Core Dept. Mixer- Kloster (F015)

Activity Description: Sand/binder mixing process.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand/binder mixer	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day this emissions unit operates:

a. The company identification of the liquid organic materials used.

b. The amounts (pounds) of liquid organic materials and sand mixed.

c. The number of hours of operation.

d. An estimate of the daily organic compound emission rate (pounds), using an emission factor of 0.51 lb OC per ton of sand.

e. An estimate of the average hourly organic compound emission rate (pounds).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Emission Limitation:
40 lbs organic compounds per day

Applicable Compliance Method:
To determine the actual emission rate for organic compounds, the following equation shall be used:

Ed = sand usage rate (in tons per day) X 0.51

where

Ed = organic compound emission rate (lbs/day)

0.51 = emission factor (lb organic compounds per ton of sand) for furan no-bake binder system (based on information provided by resin manufacturer)

2. Emission Limitation:
8 lbs organic compounds per hour

Applicable Compliance Method:
To determine the average actual emission rate for organic compounds, the following equation shall be used:

Eh = Ed/H

where

Eh = average organic compound emission rate (lbs/hr)

Ed = organic compound emission rate (lbs/day), determined in A.V.1.

H = hours of operation per day

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #2 Core Dept. Mixer- Palmer (F016)

Activity Description: Sand/binder mixing process.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand/binder mixer	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).
	OAC rule 3745-31-05 PTI 02-11167	Particulate emissions shall not exceed 0.82 lb per hour. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day this emissions unit operates:

a. The company identification of the liquid organic materials used.

b. The amounts (pounds) of liquid organic materials and sand mixed.

c. The number of hours of operation.

d. An estimate of the daily organic compound emission rate (pounds), using an emission factor of 0.51 pound OC per ton of sand.

e. An estimate of the average hourly organic compound emission rate (pounds).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:
40 lbs organic compounds per day

Applicable Compliance Method:
To determine the actual emission rate for organic compounds, the following equation shall be used:

Ed = sand usage rate (in tons per day) X 0.51

where

Ed = organic compound emission rate (lbs/day)

0.51 = emission factor (lb organic compounds per ton of sand) for furan no-bake binder system (based on information provided by resin manufacturer)

V. Testing Requirements (continued)

2. Emission Limitation:
8 lbs organic compounds per hour

Applicable Compliance Method:
To determine the average actual emission rate for organic compounds, the following equation shall be used:

Eh = Ed/H

where

Eh = average organic compound emission rate (lbs/hr)

Ed = organic compound emission rate (lbs/day), determined in A.V.1.

H = hours of operation per day

3. Emission Limitation: 0.82 pound of particulate emissions per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with the following equation:

E = Ti x 1.1 lbs PE/ton iron

where

E = lbs particulate emissions emitted per hour

Ti = tons of iron produced per hour

1.1 lbs PM/ton iron is emission factor from AP-42 Table 12.10-7.

Tons of iron produced can be estimated from hourly sand throughput multiplied by the ratio of iron to sand.

4. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a 3-minute average

Applicable Compliance Method: Compliance with the visible emission limit shall be determined in accordance with OAC rule 3745-17-03(B)(3).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #1 Core Dept. Mixer- Sand Master (F017)

Activity Description: Sand/binder mixing process.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand/binder mixer	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day this emissions unit operates:

a. The company identification of the liquid organic materials used.

b. The amounts (pounds) of liquid organic materials and sand mixed.

c. The number of hours of operation.

d. An estimate of the daily organic compound emission rate (pounds), using an emission factor of 1.17 pounds OC per ton of sand.

e. An estimate of the average hourly organic compound emission rate (pounds).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Emission Limitation:
40 lbs organic compounds per day

Applicable Compliance Method:
To determine the actual emission rate for organic compounds, the following equation shall be used:

Ed = sand usage rate (in tons per day) X 1.17 lbs/ton sand

where

Ed = organic compound emission rate (lbs/day)

1.17 = emission factor (lbs OC per ton of sand) for phenolic urethane no-bake binder system, from Ohio Cast Metal Association study

2. Emission Limitation:
8 lbs organic compounds per hour

Applicable Compliance Method:
To determine the actual average emission rate for organic compounds, the following equation shall be used:

Eh = Ed / H

where

Eh = average organic compound emission rate (lbs/hr)

Ed = daily organic compound emission rate, determined in A.V.1.

H = hours of operation each day

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #1 Core Dept. Mixer- Palmer (F018)

Activity Description: Sand/binder mixing process.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand/binder mixer	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).
	OAC rule 3745-31-05 PTI 02-9188	Particulate emissions shall not exceed 0.6 lb per hour. Visible particulate emissions shall not exceed 0% opacity at any time. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day this emissions unit operates:

a. The company identification of the liquid organic materials used.

b. The amounts (pounds) of liquid organic materials and sand mixed.

c. The number of hours of operation.

d. An estimate of the daily organic compound emission rate (pounds), using an emission factor of 1.17 pounds OC per ton of sand.

e. An estimate of the average hourly organic compound emission rate (pounds).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:
40 lbs organic compounds per day

Applicable Compliance Method:
To determine the actual emission rate for organic compounds, the following equation shall be used:

Ed = sand usage rate (in tons per day) X 1.17 lbs/ton sand

where

Ed = organic compound emission rate (lbs/day)

1.17 = emission factor (lbs OC per ton of sand) for phenolic urethane no-bake binder system, from Ohio Cast Metal Association study

V. Testing Requirements (continued)

2. Emission Limitation:
8 lbs organic compounds per hour

Applicable Compliance Method:
To determine the actual average emission rate for organic compounds, the following equation shall be used:

Eh = Ed / H

where

Eh = average organic compound emission rate (lbs/hr)

Ed = daily organic compound emission rate, determined in A.V.1.

H = hours of operation each day

3. Compliance with the particulate emission limit of 0.6 lb/hr shall be determined in accordance with the following equation:

E = Ti x 1.1 lbs PM/ton iron

where

E = lbs particulate emissions emitted per hour

Ti = tons of iron produced per hour

1.1 lbs PM/ton iron is emission factor from AP-42 Table 12.10-7.

Tons of iron produced can be estimated from hourly sand throughput multiplied by the ratio of iron to sand.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #6 (North) holding furnace - new foundry. (F019)

Activity Description: Holding and pouring of molten metal.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Iron holding furnace	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).
	OAC rule 3745-31-05 PTI 02-11167	Particulate emissions shall not exceed 3.2 lbs/hr and 3.2 tons per rolling 12-month period. Visible particulate emissions shall not exceed 5% opacity, as a six-minute average.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 10,500 tons of iron, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation for this furnace.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the 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. Emission Limitation: 3.2 lbs particulate emissions per hour

Applicable Compliance Method: To determine the actual emission rate for particulates, the following equation shall be used:

E = iron throughput (in tons per hour) X 0.6 (lbs/ton)

where

E = particulate emissions (lbs/hr)

0.6 = emission factor in lbs particulates per ton of iron (determined from AP-42 Section 12.10 and the Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources" Section 2.7 for electric induction furnaces charging and tapping)

2. Emission Limitation: 3.2 tons particulate emissions per rolling 12-month period

Applicable Compliance Method:
To determine the actual emission rate for particulate emissions, the following equation shall be used:

E = actual iron throughput (in tons per rolling 12-month period) X 0.6 X (1 ton/2000 lbs)

where

E = actual particulate emissions (tons/rolling 12-month period)

0.6 = emission factor in lbs particulates per ton of iron (determined from AP-42 Section 12.10 and the Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources" Section 2.7 for electric induction furnaces charging and tapping)

3. Emission Limitation: Visible particulate emissions shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method: Compliance with shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. This furnace shall not be used as a melting furnace. Prior to modifying this furnace in order to melt scrap, the permittee shall apply for and obtain an Ohio EPA Permit to Install.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: #5 (South) holding furnace - new foundry. (F020)

Activity Description: Holding and pouring of molten metal.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Iron holding furnace	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).
	OAC rule 3745-31-05 PTI 02-11167	Particulate emissions shall not exceed 3.2 lbs/hr and 3.2 tons per rolling 12-month period. Visible particulate emissions shall not exceed 5% opacity, as a six-minute average.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 10,500 tons of iron, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The production rate for each month.

b. The rolling, 12-month summation of the production rates.

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation for this furnace.

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

V. Testing Requirements

1. Emission Limitation: 3.2 lbs particulate emissions per hour

Applicable Compliance Method: To determine the actual emissions rate for particulates, the following equation shall be used:

E = iron throughput (in tons per hour) X 0.6 (lbs/ton)

where

E = particulate emissions (lbs/hr)

0.6 = emission factor in lbs particulates per ton of iron (determined from AP-42 Section 12.10 and the Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources" Section 2.7 for electric induction furnaces charging and tapping)

2. Emission Limitation: 3.2 tons particulate emissions per rolling 12-month period

Applicable Compliance Method: To determine the actual emission rate for particulates, the following equation shall be used:

E = actual iron throughput (in tons per rolling 12-month period) X 0.6 X (1 ton/2000 lbs)

where

E = actual particulate emissions (tons/yr)

0.6 = emission factor in lbs particulates per ton of iron (determined from AP-42 Section 12.10 and the Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources" Section 2.7 for electric induction furnaces charging and tapping)

3. Emissions Limitation: Visible particulate emissions shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. This furnace shall not be used as a melting furnace. Prior to modifying this furnace in order to melt scrap, the permittee shall apply for and obtain an Ohio EPA Permit to Install.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Foundry #2 Self-managed Mixer (F021)

Activity Description: Sand/binder mixing process

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
foundry no. 2 Palmer M-2000 mixer	OAC rule 3745-31-05 (A)(3) PTI 02-11997	Visible particulate emission from any building opening shall not exceed 5 percent opacity as a 6-minute average. Particulate emissions shall not exceed 4.65 pounds per hour and 9.9 tons per year. Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07 (G)(2)	Organic compound emissions shall not exceed 8 pounds per hour; 40 pounds per day.
	OAC rule 3745-17-08 (B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 4250 hours.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:

a. the name and identification number of each liquid organic material employed;

b. the weight, in pounds or tons, of sand and liquid organic material mixed;

c. the number of hours of operation;

d. the daily organic compound emission rate (pounds) using an emission factor of 0.413 pound organic compound per ton of sand mixed; and,

e. the average hourly organic compound emission rate (d)/(c).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. an identification of each day during which the average hourly organic emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and,

b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Particulate emissions shall not exceed 4.65 pounds per hour.

Applicable Compliance Method: Compliance with the above limitiation shall be demonstrated by using the following equation:

E = Ts x 0.275, where

E = pounds of particulate emissions emitted per hour

Ts = tons of sand used per hour

0.275 = emission factor based on AP-42 Table 12.10-7 and a sand to metal ratio of 4:1 (pounds PE per ton of sand).

V. Testing Requirements (continued)

2. Emission Limitation: Particulate emissions shall not exceed 9.9 tons per year.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

E = (Ts x 0.275)/2000, where

E = tons of particulate emissions per year

Ts = tons of sand used per year

0.275 = emission factor based on AP-42 Table 12.10-7 and a sand to metal ratio of 4:1 (pounds PE per ton of sand)

2000 = conversion factor (pounds per ton)

3. Emission Limitation: Visible particulate emission from any building opening shall not exceed 5 percent opacity as a 6-minute average.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using Method 9 of 40 CFR, Part 60, Appendix A, if required.

4. Emission Limitation: Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:Compliance with the above limitations shall be demonstrated by the record keeping requirements and the following equation:

E = Ts x 0.413, where

E = organic compound emission rate (pounds)

Ts = tons of sand mixed

0.413 = organic compound emission factor, based on lab test data provided by Ashland Chemical on Chem-Rez resin (a modified furan resin system)

If the type of the resin changes, the permittee shall determine a new emission factor based on supplier's test data.

5. Emission Limitation: 7.3 tons of organic compound per year.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by a summation of the daily organic compound emissions from section A.III.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
foundry no. 2 Palmer M-2000 mixer		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (F021) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxics" policy ("Air Toxics Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case"pollutant(s):

Pollutant: Methyl Alcohol

TLV (ug/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 439.5

MAGLC (ug/m3): 6200

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

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

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 Core Dept Palmer M200 Sand Mixer (F022)

Activity Description: Sand/binder mixing process

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No. 2 department core sand and mold sand Palmer 2000 mixer, using phenolic urethane no-bake resin system	OAC rule 3745-31-05(A)(3) PTI 02-13610	Visible emissions from building openings shall not exceed 5 percent opacity as a six-minute average. Organic compound emissions shall not exceed 8 pounds per hour, 40 pounds per day, and 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). Particulate emissions shall not exceed 1.8 pounds per hour and 7.88 tons per year.
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)(2).
	OAC rule 3745-21-07(G)	See section A.I.2.a

2. Additional Terms and Conditions

2.a Although OAC rule 3745-21-07(G)(9)(i) specifies an exemption from the requirements of OAC rule 3745-21-07 for the use of a phenolic urethane resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by Ohio EPA and became effective on June 15, 1999. Ohio EPA has received confirmation from USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:

a. the name and identification number of each liquid organic material employed;

b. the weight, in or tons, of sand and liquid organic material mixed;

c. the daily organic compound emission rate (pounds) using an emission factor of 1.17 pounds per ton of sand mixed;

d. the number of hours of operation; and,

e. the average hourly organic compound emission rate (c)/(d).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information for emissions unit F022:

a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and,

b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Particulate emissions shall not exceed 1.8 pounds per hour.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

E = Ts x 0.3, where

E = pounds of particulate emissions per hour

Ts = tons of sand used per hour, maximum sand throughput (6 tons)

0.3 = emission factor (pound of particulate emissions per ton of sand) based on RACM document, Table 2.7-1 for Iron Foundries

V. Testing Requirements (continued)

2. Emission Limitation: Particulate emissions shall not exceed 7.88 tons per year.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

E = (Ts x 0.3)/2000, where

E = tons of particulate emissions emitted per year

Ts = tons of sand used per year, based on recordkeeping required in section A.III

0.3 = emission factor (pound of particulate emissions per ton of sand) based on RACM document, Table 2.7-1 for Iron Foundries

2000 = conversion factor (pounds per ton)

3. Emission Limitation: Visible emissions from any building openings shall not exceed 5 percent opacity as a six-minute average.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by USEPA reference method 9.

4. Emission Limitation: Organic compouind emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method: Compliance with the above limitations shall be demonstrated by the record keeping requirements from Section A.III and the following equation.

To determine the daily organic compound emission rate from this emissions unit, the following equation shall be used:

E = Ts x 1.17, where

E = organic compound emission rate (pounds)

Ts = tons of sand mixed

1.17 = emission factor, (pounds of organic emissions per ton of sand), from the Ohio Cast Metals Association study concerning phenolic urethane no-bake binder systems

If the type of the resin changes, a new emission factor may need to be established.

5. Emission Limitation: Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by a summation of the daily organic compound emissions from section A.III.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No. 2 department core sand and mold sand Palmer 2000 mixer using phenolic urethane no-bake resin system		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (F022) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Phenol

TLV (ug/m3): 19000

Maximum Hourly Emission Rate (lbs/hr): 7.52

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 424

MAGLC (ug/m3): 452

Pollutant: Naphthalene

TLV (ug/m3): 52000

Maximum Hourly Emission Rate (lbs/hr): 6.84

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 386

MAGLC (ug/m3): 1238

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

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value modeled;

b. changes in the composition of the materials, that would result in an increase in emissions of any pollutant with a listed TLV tha was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and

b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 Foundry CE 2000 #/hr. Sand Mixer (F023)

Activity Description: Sand/binder mixing process

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No. 1 foundry CE continuous mixer	OAC rule 3745-31-05(A)(3) PTI 02-14154	Visible emissions from any building opening shall not exceed 5 percent opacity as a six-minute average. Particulate emissions shall not exceed 3.5 pounds per hour; 15.2 tons per year. Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour; 40 pounds per day.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e).
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:

a. the name and identification number of each liquid organic material employed;

b. the weight, in pounds or tons, of sand and liquid organic material mixed;

c. the number of hours the emissions unit was in operation;

d. the daily organic compound emission rate (pounds), by multiplying (c) by an emission factor of 4.79 pounds of organic compound per hour of operation;

e. the average hourly organic compound emission rate (d)/(c); and,

f. the average hourly pounds or tons of sand used per day, (b)/(c).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the building that houses 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 operation;
d. the total duration of any visible emissions incident; and,
e. any corrective actions taken to eliminate the visble emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information on emissions unit F023:

a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and

b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: 3.5 pounds per hour of particulate emissions

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

E = Tsh x 0.275, where

E = pounds per hour of particulate emissions

Tsh = tons of sand used per hour

0.275 = emission factor based on AP-42, section 12.10, Gray Iron Foundries, and a sand to metal ratio of 4:1.

V. Testing Requirements (continued)

2. Emission Limitation: 15.2 tons per year of particulate emissions

Applicable Compliance Method: Compliance shall be demonstrated by using the following equation:

E = (Tsy x 0.275)/2000, where

E = tons per year of particulate emissions

Tsy = tons of sand used per year

0.275 = emission factor based on AP-42, section 12.10, Gray Iron Foundries, and a sand to metal ratio of 4:1.

2000 = conversion factor, pounds per ton

3. Emission limitation: Visible emissions shall not exceed 5 percent opacity as a six minute average from any building opening

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using Method 9 of 40 CFR, Part 60, Appendix A.

4. Emission Limitation: 8 pounds per hour and 40 pounds per day of organic compounds

Applicable Compliance Method: Compliance with the above limitations shall be demonstrated by the record keeping requirements from section A.III of these terms and conditions and the following equation.

To determine the daily organic compound emission rate from this emissions unit, the following equation shall be used:

E = H x 4.79, where

E = organic compound emission rate (pounds)

H = hours of operation

4.79 = organic compound emission factor, based on lab test data provided by Ashland Chemical on Chem-Rez resin (a modified furan resin system)

If the type of the resin changes, or the amount of resin mixed with the sand changes. the permittee shall determine a new emission factor based on supplier's test data.

5. Emission Limitation: 7.3 tons of organic compounds per year

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by a summation of the daily organic compound emissions and by the record keeping requirements from section A.III of these terms and conditions.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No. 1 foundry CE continuous mixer		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (F023) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Methyl Alcohol

TLV (mg/m3): 262

Maximum Hourly Emission Rate (lbs/hr): 0.26

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 300.7

MAGLC (ug/m3): 6240

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

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

2. a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Paint Booth (K002)

Activity Description: Application of coatings onto 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Paint spray booth for coating castings	OAC rule 3745-21-09 (U)(1)(d)	3.5 lbs of volatile organic compounds (VOC) per gallon of coating, excluding water and exempt solvents
	OAC rule 3745-17-11(B)(1)	PM:0.551 lb/hr
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall employ a dry exhaust filtration system while this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the line:

a. The name and identification number of each coating, as applied.

b. The VOC content of each coating (excluding water and exempt solvents), as applied.

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

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

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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 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. Emission Limitation: 0.551 lb particulate emissions per hour

Applicable Compliance Method: To determine the actual worst case emission rate for particulate emissions, the following equation shall be used:

E = maximum coating solids usage rate (in pounds per hour) X (1-TE) X (1-CE)

E = particulate emissions rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

2. Emission Limitation: Visible particulate matter emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method: U.S. EPA reference method 9, if required by the Ohio EPA

3. Emission Limitation: 3.5 lbs VOC/gallon coating, excluding water and exempt solvents

Applicable Compliance Method: OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Shot Blast 6 ft. (P004)

Activity Description: Surface cleaning of 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Shot blast cleaning of castings, controlled by a fabric filter (baghouse #1)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 5.38 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 5.38 pounds per hour

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Shot Blast 8 ft. (P005)

Activity Description: Shot blast cleaning of 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Shot blast cleaning of castings, controlled by a fabric filter (#7 baghouse)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 9.94 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

Appicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 9.94 pounds per hour

Appicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Vac-Blast (P006)

Activity Description: Grit blasting cabinet.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Grit blast cleaning of castings, controlled by a fabric filter (baghouse #2)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 4.76 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emissions Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 4.76 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Cut-off Saw (P007)

Activity Description: Abrasive wheel cut-off for gates and risors from 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Abrasive wheel cut-off for gates and risers from castings, controlled by a fabric filter (baghouse #6)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 4.91 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 4.91 pounds per hour

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: N. Plant Reclamation (P008)

Activity Description: Pneumatic cleaning of castings and sand reclamation.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Sand reclaim system: natural gas fired sand dryer, sand scrubber, cooler, associated storage silos and material handling equipment, controlled by 2 fabric filters (baghouses #3 and #4)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Total particulate emissions from the baghouses, which have pick-up hoods at the natural gas-fired dryer, sand dryer, sand scrubber, cooler storage silos, and material handling operations, shall not exceed 4.48 pounds per hour. See A.I.2.a.

2. Additional Terms and Conditions

2.a Each piece of equipment that is part of this emissions unit and has particulate emissions shall be vented to the baghouses serving this emissions unit in accordance with good engineering practices.

II. Operational Restrictions

1. Baghouse Operational Restrictions

a. The pressure drop across baghouse #3 shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

b. The pressure drop across baghouse #4 shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

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

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Total combined particulate emissions from baghouse #3 and baghose #4 shall not exceed 4.48 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).

3. Emission testing requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1-5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted for all stack emissions while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

A particulate emissions test also shall be conducted at the inlets of the control devices to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC Rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

4. 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 Northeast District Office within 30 days following completion of the test(s).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Scrap Dryer (P010)

Activity Description: Drying of scrap iron and steel.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Natural gas fired scrap dryer	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 19.2 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

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

IV. Reporting Requirements

1. The permittee shall submit 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 Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions shall not exceed 19.2 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Meltshop Innoculation (P017)

Activity Description: Ductile iron processing.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Ductile iron processing in meltshop, controlled by a fabric filter (baghouse #17)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 5.85 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

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

2. The baghouse used to control particulate emissions from this emissions unit (baghouse #17) also controls particulate emissions from #3 shakeout (P026). This emissions unit shall not operate at the same time that emissions unit P026 is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

2. The permittee shall maintain daily records on the periods of time that this emissions unit and emissions unit P026 are in operation.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time that this emissions unit was in operation at the same time that emissions unit P026 (#3 shakeout) was in operation.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitaion: Particulate emissions from the baghouse shall not exceed 5.85 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).

3. Emission testing requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.

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

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC Rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

4. 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 Northeast District Office within 30 days following completion of the test(s).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Shakeout #1 (P023)

Activity Description: Shakeout/separation of sand and 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No.1 shakeout system, controlled by a fabric filter (baghouse #8)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 5.59 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 5.59 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).

3. Emission testing requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.

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

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC Rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

4. 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 Northeast District Office within 30 days following completion of the test(s).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Shakeout #2 (P024)

Activity Description: Shakeout/separation of sand and 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No.2 shakeout system, controlled by a fabric filter (baghouse #15)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 2.93 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

2. The baghouse used to control particulate emissions from this emissions unit (baghouse #15) also controls particulate emissions from #3 ductile iron station (F007). This emissions unit shall not operate at the same time that emissions unit F007 is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

2. The permittee shall maintain daily records on the periods of time that this emissions unit and emissions unit F007 are in operation.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time that this emissions unit was in operation at the same time that emissions unit F007 (#3 ductile iron station) was in operation.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 2.93 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Shakeout #3 (P026)

Activity Description: Shakeout/separation of sand and 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No.3 shakeout system, controlled by a fabric filter (baghouse #17)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the baghouse shall not exceed 2.24 pounds per hour

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. Baghouse Operational Restrictions

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

2. The baghouse used to control particulate emissions from this emissions unit (baghouse #17) also controls particulate emissions from the meltshop ductile iron station (P017). This emissions unit shall not operate at the same time that emissions unit P017 is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

2. The permittee shall maintain daily records on the periods of time that this emissions unit and emissions unit P017 are in operation.

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time that this emissions unit was in operation at the same time that emissions unit P017 (meltshop ductile iron station) was in operation.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 2.24 pounds per hour

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: MS Sand Reclaimer (P027)

Activity Description: South plant mechanical reclaimer.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
South plant sand reclaim system: ballmill crusher, sand scrubber, cooler/classifier, associated storage silos and material handling system, controlled by a fabric filter (baghouse #13)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-6389	Particulate emissions from the baghouse, which has pick-up hoods at the ballmill crusher, sand scrubber, cooler/classifier, storage silos, and material handling operations, shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases and 1.92 pounds per hour. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See A.I.2.a.

2. Additional Terms and Conditions

2.a Each piece of equipment that is part of this emissions unit and has particulate emissions shall be vented to the baghouse serving this emissions unit in accordance with good engineering practices.

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

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

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

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. 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. These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions from the baghouse shall not exceed 0.03 grain per dry standard cubic foot of exhaust gases and 1.92 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). Emission testing in accordance with section A.V.3 of this permit shall be done to demonstrate compliance with this emissions limitation.

V. Testing Requirements (continued)

3. Emission testing requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

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

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted for all stacks while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC Rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

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 Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast District Office 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 Northeast District Office within 30 days following completion of the test(s).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: T Reclamation System (P028)

Activity Description: South plant thermal reclaimer.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
South plant sand reclaim system: sand scrubber, cooler/classifier, associated storage silos and material handling equipment, controlled by a fabric filter (baghouse #12)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05 PTI 02-6389	Particulate emissions from the baghouse, which has pick-up hoods at the sand scrubber, cooler/classifier, storage silos and material handling operations, shall not exceed 0.03 grain per dry standard cubic foot of exhaust gases and 1.26 pounds per hour. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. See A.I.2.a.

2. Additional Terms and Conditions

2.a Each piece of equipment that is part of this emissions unit and has particulate emissions shall be vented to the baghouse serving this emissions unit in accordance with good engineering practices.

II. Operational Restrictions

1. Baghouse Operational Restrictions

The pressure drop across the baghouse shall be maintained within the range of 4 to 8.5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Baghouse Pressure Drop Monitoring and Record Keeping Requirements

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 daily basis.

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

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

IV. Reporting Requirements

1. Baghouse Pressure Drop Reporting Requirements

The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. 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. These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: Compliance shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

2. Emission Limitation: Particulate emissions shall not exceed 0.03 grain per dry standard cubic foot of exhaust gases.

Appliacble Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). Emissions testing in accordance with section A.V.7. of this permit shall be done to demonstrate compliance with this emissions limitation.

3. Emission Limitation: Particulate emissions shall not exceed 1.26 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10). Emissions testing in accordance with section A.V.7. of this permit shall be done to demonstrate compliance with this emission limitation.

V. Testing Requirements (continued)

4. Emission testing requirements

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

a. The emission testing shall be conducted within 3 months after issuance of the permit and 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limits for particulate emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions, Methods 1-5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted for all stacks while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC Rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

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 Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 Northeast District Office within 30 days following completion of the test(s).

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core and mold wash operations (P029)

Activity Description: Core/Mold wash operations.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Foundry core and mold wash operations	OAC rule 3745-21-07(G)(2)	See additional terms and conditions

2. Additional Terms and Conditions

2.a This emissions unit shall not employ any liquid organic materials which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records for all materials used in this emissions unit:

a. The identification of each chemical compound and its physical state.

b. For each liquid organic materials, whether or not the material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which any photochemically reactive materials were employed.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core and mold wash operations (P029)

Activity Description: Core/Mold wash operations.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Foundry core and mold wash operations	OAC rule 3745-21-07(G)(2)	See additional terms and conditions

2. Additional Terms and Conditions

2.a This emissions unit shall not employ any liquid organic materials which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records for all materials used in this emissions unit:

a. The identification of each chemical compound and its physical state.

b. For each liquid organic materials, whether or not the material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which any photochemically reactive materials were employed.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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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