



State of Ohio Environmental Protection Agency

Street Address:

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

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Mailing Address:

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

09/26/01

**RE: Proposed Title V Chapter 3745-77 Permit
02-50-11-0316
Parker Gear Pump Division**

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

Dear Ms. Damico:

The proposed issuance of the Title V permit for Parker Gear Pump Division, has been created in Ohio EPA's State Air Resources System (STARS) on 09/26/01, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

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

PROPOSED TITLE V PERMIT

Issue Date: 09/26/01	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 02-50-11-0316 to:
Parker Gear Pump Division
1775 Logan Ave.
P.O.Box 239
Youngstown, OH 44501-0239

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

F001 (Plant Roadways & Parking Areas) Traffic due to product and delivery trucks, fork lifts, pickup trucks, and employee and visitor vehicles	Making molds from returned sand, new sand, bond & water	Mold handler: pouring and cooling lines); sand and metal separation using a rotating shakeout drum; transfer of castings by forklift and storage in hoppers for cooling.
F002 (Induction Furnace #1) Raw material charging and melting; tapping of molten metal at furnace.	F013 (Mold Making, East) Making molds from returned sand, new sand, bond & water	P033 (Foundry Area Shotblast) Casting cleaning equipment using shot to blast the surface.
F003 (Induction Furnace #2) Raw material charging and melting; tapping of molten metal at furnace.	F014 (Compacted Graphite (CG) Inoculation) Inoculation (in Tundish Ladle) of molten metal from furnace.	P036 (Charge Handling and Preheater) Truck unloading, scrap metal storage, and transporting scrap metal via an overhead magnetic crane to the preheater; transfer from the preheater to the charge bucket, then transfer to the furnaces.
F007 (Autopour and Mold Handler: Pouring and Cooling #1) Pouring of molten metal from autopour furnaces or pouring ladles into green sand molds on a conveyor line with subsequent cooling.	K001 (Paint Spray Booth) Cleaning metal gears and pumps using a solvent spray; painting metal gears and pumps in spraybooth.	P901 (Sand Handling, Storage and Preparation) Transferring and mixing of return sand, new sand, bond & water to produce prepared green sand for moldmaking; Unloading new sand and bond from trucks and transferring to storage silos using a pneumatic conveyor.
F008 (Autopour and Mold Handler: Pouring and Cooling #2) Pouring of molten metal from autopour furnaces or pouring ladles into green sand molds on a conveyor line with subsequent cooling.	P015 (Finishing Area Shotblast) Cleaning of castings using shot to blast the surface.	
F012 (Mold Making, West)	P020 (Grinding Operations) Grinding of castings for final product finishing.	
	P030 (Mold Dump Conveyor and Didion Shakeout) Mold transfer to shakeout (after the Autopour and	

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 current 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 emission limitations, operational restrictions, and control device operating parameter limitations, 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 monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to

the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. 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 Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

B001 - Office heaters
B002 - R&D heaters
B003 - Foundry heaters
B004 - Foundry heaters
B005 - Foundry heaters
B006 - Foundry air make up
B007 - Foundry air make up
B008 - Hydraulics heater
B009 - Hydraulics heaters
B010 - Foundry oven
B011 - Office boilers
B016 - Hydraulics heaters
B017 - Hyd. modine air make up unit
B018 - Hydraulics heaters
B027 - R&D boilers
B028 - Office A/C heaters
B029 - Office boiler
F010 - Holding furnace
P006 - Carburizing furnace
P007 - Tempering furnace
P008 - Tempering furnace
P009 - Carburizing furnace
P010 - Liquid quench tank
P011 - Liquid quench tank
P013 - Wash & rinse tank
P024 - Mills, drills, reamers
P025 - Mills, drills, reamers
P026 - Mills, drills, reamers
P028 - Coremaking
Z001 - Hot water heaters
Z002 - Heat treat generators
Z003 - Corewashing & core drying
Z004 - Facility storage piles
Z005 - Machining operations - gear department
Z006 - Machining operations - pump department
Z007 - Machining operations - quench furnaces
Z008 - Cold cleaner - 2826
Z009 - Cold cleaner - 2829
Z010 - Cold cleaner - 1156
Z011 - Cold cleaner - 3038
Z012 - Cold cleaner - 1366
Z013 - Cold cleaner - 296
Z014 - Cold cleaner - tool room
Z015 - Cold cleaner - lab
Z016 - Cold cleaner - 1500
Z017 - Cold cleaner - 5014a
Z018 - Cold cleaner - 5014b
Z019 - Cold cleaner - 1277
Z020 - Carburizing furnace - 1473
Z021 - New sand bin with Torit collector
Z022 - Bond bin with Torit collector

Each insignificant 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: Plant Roadways & Parking Areas (F001)

Activity Description: Traffic due to product and delivery trucks, fork lifts, pickup trucks, and employee and visitor vehicles

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paved roadways and parking areas (see Section A.2.a)	OAC rule 3745-17-07(B)(4)	No visible particulate emissions except for 6 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(8), (B)(9)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, A.2.d, and A.2.f through A.2.j)
Unpaved roadways and parking areas (see Section A.2.b)	OAC rule 3745-17-07(B)(5)	No visible particulate emissions except for 13 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(2)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j)

2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Paved roadways:

All paved roadways associated with the administration building, main entrance, and basic facilities.

Paved parking areas:

Administration building, main entrance, and basic facilities paved parking areas.

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Unpaved roadways:

All unpaved roadways associated with the administration building, main entrance, and basic facilities.

Unpaved parking areas:

Administration building, main entrance, and basic facilities unpaved parking areas.

- 2.c** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water, sweeping, and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with water and/or other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2. Additional Terms and Conditions (continued)

- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

1. Operational Restrictions Concerning the Use of Dust Suppressants

When a dust suppressant is used for controlling fugitive dust from the unpaved road segments and parking areas, the following restrictions apply:

- a. The permittee shall certify or possess certification that all dust suppressants used to control fugitive dust meet the PCB limitations set forth in 40 CFR 761, and that there are no listed hazardous wastes or characteristic hazardous wastes as set forth in 40 CFR 261.
- b. The permittee shall not apply used oil as defined by OAC rule 3745-279-01(A)(12) as a dust suppressant.
- c. The dust suppressant shall be applied in such a manner as to prevent pollution of waters of the State as required by the Ohio Revised Code, section 6111.

III. Monitoring and/or Record Keeping Requirements

- 1.** Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadways and parking areas in accordance with the following frequencies:
- Paved roadways and parking areas: All
- Minimum inspection frequency: Weekly
- Unpaved roadways and parking areas: All
- Minimum inspection frequency: Daily
- 2.** The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- 3.** The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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

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

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Induction Furnace #1 (F002)

Activity Description: Raw material charging and melting; tapping of molten metal at furnace.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Electric induction furnace #1 for gray iron	OAC rule 3745-31-05(A)(3) PTI No. 02-1565	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07 (B) and 3745-17-08 (B).
	OAC rule 3745-17-07(B)	Visible particulate matter emissions shall not exceed twenty-percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a.

2. Additional Terms and Conditions

- 2.a Only non-oily scrap shall be charged for the purposes of melting in the electric induction furnace.
- 2.b Electric induction furnaces F002 and F003 shall not be operated simultaneously for scrap melting.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the fugitive egress points associated with 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.
2. The permittee shall record all periods of time during which both electric induction furnaces were operated simultaneously for the purpose of scrap melting.

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 fugitive egress points associated with 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.
2. The permittee shall submit semiannual written reports which identify all time periods during which the electric induction furnaces operated simultaneously for the purpose of scrap melting. 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. Emissions Limitations:
Twenty-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the electric induction furnace operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Induction Furnace #2 (F003)

Activity Description: Raw material charging and melting; tapping of molten metal at furnace.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Electric induction furnace #2 for gray iron	OAC rule 3745-31-05(A)(3) PTI No. 02-1565	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07 (B) and 3745-17-08 (B).
	OAC rule 3745-17-07(B)	Visible particulate matter emissions shall not exceed twenty-percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a.

2. Additional Terms and Conditions

- 2.a Only non-oily scrap shall be charged for the purposes of melting in the electric induction furnace.
- 2.b Electric induction furnaces F002 and F003 shall not be operated simultaneously for scrap melting.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the fugitive egress points associated with 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.
2. The permittee shall record all periods of time during which both electric induction furnaces were operated simultaneously for the purpose of scrap melting.

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 fugitive egress points associated with 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.
2. The permittee shall submit semiannual written reports which identify all time periods during which the electric induction furnaces operated simultaneously for the purpose of scrap melting. 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. Emissions Limitations:
Twenty-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the electric induction furnace operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Autopour and Mold Handler: Pouring and Cooling #1 (F007)

Activity Description: Pouring of molten metal from autopour furnaces or pouring ladles into green sand molds on a conveyor line with subsequent cooling.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Autopour and mold handler #1	OAC rule 3745-31-05(A)(3) PTI No. 02-1565	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07 and OAC rule 3745-17-08.
	OAC rule 3745-17-07(B)	Visible fugitive PE shall not exceed twenty-percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a.

2. Additional Terms and Conditions

- 2.a The permittee shall implement maintenance procedures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from any fugitive egress points 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(s) and/or any fugitive egress points 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. Emissions Limitation:
Twenty-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the autopour and mold handler operations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Autopour and Mold Handler: Pouring and Cooling #2 (F008)

Activity Description: Pouring of molten metal from autopour furnaces or pouring ladles into green sand molds on a conveyor line with subsequent cooling.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Autopour and mold handler #2	OAC rule 3745-31-05(A)(3) PTI No. 02-1565	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07 and OAC rule 3745-17-08.
	OAC rule 3745-17-07(B)	Visible fugitive PE shall not exceed twenty-percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a.

2. Additional Terms and Conditions

- 2.a The permittee shall implement maintenance procedures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from any fugitive egress points 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(s) and/or any fugitive egress points 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. Emissions Limitation:
Twenty-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the autopour and mold handler operations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Making, West (F012)

Activity Description: Making molds from returned sand, new sand, bond & water

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hunter G-series automatic matchplate molding machine for sand castings (west)	OAC rule 3745-31-05(A)(3) PTI No. 02-11457	PE: 0.242 pound per hour and 1.06 tons per year. OC: 6.36 pounds per hour and 27.86 tons per year.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B), 3745-17-08(B), and 3745-21-07(G)(2).
	OAC rule 3745-17-08(B)	No control measures are required.
	OAC rule 3745-21-07(G)(2)	See A.I.2.a.
	OAC rule 3745-17-07(B)	Visible particulate matter emissions shall not exceed twenty percent opacity, as a three-minute average.

2. Additional Terms and Conditions

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

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following daily records for all materials used in this emissions unit:
 - a. the identification of each chemical compound and its physical state; and,
 - b. for any liquid organic materials, whether or not the material is a photochemically reactive material as defined in OAC rule 3745-21-01 (C)(5).

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

2. The permittee shall keep the following records each week:
 - a. The company identification of the parting spray used.
 - b. The amount of parting spray used (gallons).
 - c. The organic compound content of the parting spray (lbs OC/gal).
 - d. The pounds of organic compounds emitted, assuming 100% evaporative loss for the organic compounds.
 - e. The hours of operation for the emissions unit.
 - f. The average organic compound emissions rate (d/e), in pounds/hour.
3. The permittee shall record the tons of iron poured annually.
4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any egress points 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 deviation(excursion) reports which identify each day during which any photochemically reactive materials were employed.
2. The permittee shall submit deviation(excursion) reports which identify each week when the organic compound limit of 6.36 pounds per hour is exceeded, and the actual hourly average organic compound emission rate for each such week.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from any egress points 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. Emissions Limitation:
PE: 0.242 pound per hour of particulate emissions.

Applicable Compliance Method:

To determine the actual particulate emission rate for the mold making operations the following equation shall be used:

$$E = \text{maximum tons of metal poured (tons metal/hr)} \times 0.04 \text{ pound PE/ton metal poured}$$

where:

$$E = \text{particulate emissions (lbs/hr)}$$

0.04 pound particulate emissions/ton metal = emission factor in pounds of particulate emissions per ton of metal poured (from the Ohio EPA document, "Reasonably Available Control Measures", Table 2.7-1).

V. Testing Requirements (continued)

2. Emissions Limitation:
1.06 tons per year of particulate emissions.

Applicable Compliance Method:

To determine the actual particulate emission rate for the mold making operations the following equation shall be used:

$$E = \text{actual tons of metal poured (tons metal/yr)} \times 0.04 \text{ pound PE/ton metal poured} \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{particulate emissions (tons/yr)}$$

0.04 pound particulate emissions/ton metal = emission factor in pounds of particulate emissions per ton of metal poured (from the Ohio EPA document, "Reasonably Available Control Measures", Table 2.7-1).

3. Emissions Limitation:
6.36 pounds per hour of organic compounds

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by record keeping required in Section A.III.2. The organic content of the parting spray shall be determined by U.S. EPA Method 24 or formulation data.

4. Emissions Limitation:
27.86 tons per year of organic compounds

Applicable Compliance Method:

To determine compliance with the organic compound limit, the following equation shall be used:

$$E = \text{parting spray used (gals /yr)} \times \text{pounds OC per gallon of parting spray (lbs/gal)} \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{organic compound emissions (tons/yr)}$$

5. Emissions Limitation:
Twenty-percent opacity, as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation for the particulate matter emissions shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Making, East (F013)
Activity Description: Making molds from returned sand, new sand, bond & water

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hunter G-series automatic matchplate molding machine for sand castings (east)	OAC rule 3745-31-05(A)(3) PTI No. 02-14318	PE: 0.242 pound per hour and 1.06 tons per year. OC: 4.61 pounds per hour and 20.19 tons per year.
	OAC rule 3745-17-08(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B), 3745-17-08(B), and 3745-21-07(G)(2). No control measures are required.
	OAC rule 3745-21-07(G)(2)	See A.I.2.a.
	OAC rule 3745-17-07(B)	Visible particulate matter emissions shall not exceed twenty percent opacity, as a three-minute average.

2. Additional Terms and Conditions

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

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following daily records for all materials used in this emissions unit:
 - a. the identification of each chemical compound and its physical state; and,
 - b. for any liquid organic materials, whether or not the material is a photochemically reactive material as defined in OAC rule 3745-21-01 (C)(5).

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

2. The permittee shall keep the following records each week:
 - a. The company identification of the parting spray used.
 - b. The amount of parting spray used (gallons).
 - c. The organic compound content of the parting spray (lbs OC/gal).
 - d. The pounds of organic compounds emitted, assuming 100% evaporative loss for the organic compounds.
 - e. The hours of operation for the emissions unit.
 - f. The average organic compound emissions rate (d/e), in pounds/hour.
3. The permittee shall record the tons of iron poured annually.
4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any egress points 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 deviation(excursion) reports which identify each day during which any photochemically reactive materials were employed.
2. The permittee shall submit deviation(excursion) reports which identify each week when the organic compound limit of 4.61 pounds per hour is exceeded, and the actual hourly average organic compound emission rate for each such week.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from any egress points 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. Emissions Limitation:
PE: 0.242 pound per hour of particulate emissions.

Applicable Compliance Method:

To determine the actual particulate emission rate for the mold making operations the following equation shall be used:

$E = \text{maximum tons of metal poured (tons metal/hr)} \times 0.04 \text{ pound PE/ton metal poured}$

where:

$E = \text{particulate emissions (lbs/hr)}$

0.04 pound particulate emissions/ton metal = emission factor in pounds of particulate emissions per ton of metal poured (from the Ohio EPA document, "Reasonably Available Control Measures", Table 2.7-1).

V. Testing Requirements (continued)

2. Emissions Limitation:
1.06 tons per year of particulate emissions.

Applicable Compliance Method:

To determine the actual particulate emission rate for the mold making operations the following equation shall be used:

$$E = \text{actual tons of metal poured (tons metal/yr)} \times 0.04 \text{ pound PE/ton metal poured} \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{particulate emissions (tons/yr)}$$

0.04 pound particulate emissions/ton metal = emission factor in pounds of particulate emissions per ton of metal poured (from the Ohio EPA document, "Reasonably Available Control Measures", Table 2.7-1).

3. Emissions Limitation:
4.61 pounds per hour of organic compounds

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by record keeping required in Section A.III.2. The organic content of the parting spray shall be determined by U.S. EPA Method 24 or formulation data.

4. Emissions Limitation:
20.19 tons per year of organic compounds

Applicable Compliance Method:

To determine compliance with the organic compound limit, the following equation shall be used:

$$E = \text{parting spray used (gals /yr)} \times \text{pounds OC per gallon of parting spray (lbs/gal)} \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{organic compound emissions (tons/yr)}$$

5. Emissions Limitation:
Twenty-percent opacity, as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation for the particulate matter emissions shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Compacted Graphite (CG) Inoculation (F014)
Activity Description: Inoculation (in Tundish Ladle) of molten metal from furnace.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Compacted graphite inoculation using a Tundish ladle	OAC rule 3745-31-05(A)(3) PTI No. 02-11684	PE: 20.0 pounds per hour and 8.8 tons per year. Visible fugitive PE shall not exceed five-percent opacity, as a three-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08 (B).
	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.a.

2. Additional Terms and Conditions

- 2.a A Tundish ladle shall be employed at all times.

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 4380 tons of inoculated metal, based upon a rolling, twelve-month summation of the production rates.

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 (tons of metal produced); and
 - b. the rolling, twelve-month summation of the production rates (tons of metal produced).
2. The permittee shall maintain records of when the Tundish ladle is not used when making inoculated metal.

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

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any egress points 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 deviation (excursion) reports that identify all exceedances of the rolling, twelve-month production rate limitation. These reports shall be submitted to the Ohio EPA, Northeast District Office, Division of Air Pollution Control no later than forty-five days from the end of the month in which the exceedance occurred.
2. The permittee shall submit semiannual written reports identify those periods of time when the Tundish ladle was not used in making inoculated metal. 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.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from any egress points 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. Emissions Limitation:
PE: 20.0 pounds per hour of fugitive particulate emissions.

Applicable Compliance Method:

To determine the actual fugitive particulate emission rate for the compacted graphite inoculation operations the following equation shall be used:

$$E = \text{maximum production of tons of inoculated metal (tons metal/hr)} \times 4.0 \text{ pounds PE/ton metal}$$

where:

$$E = \text{fugitive particulate emissions (lbs/hr)}$$

4.0 pounds particulate emissions/ton metal = emission factor in pounds of particulate emissions per ton of metal inoculated (from AP-42 Section 12.10, Iron Foundries, 1995 revision).

V. Testing Requirements (continued)

2. Emissions Limitation:
8.8 tons per year of fugitive particulate emissions.

Applicable Compliance Method:

To determine the actual fugitive particulate emission rate for the compacted graphite inoculation operations the following equation shall be used:

$$E = \text{tons of inoculated metal (tons metal/yr)} \times 4.0 \text{ pounds PE/ton metal} \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{fugitive particulate emissions (tons/yr)}$$

4.0 pounds particulate emissions/ton metal = emission factor in pounds of particulate emissions per ton of metal inoculated (from AP-42, Section 12.10, Iron Foundries, 1995 revision).

3. Emissions Limitation:
Five-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the compacted graphite inoculation operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Paint Spray Booth (K001)

Activity Description: Cleaning metal gears and pumps using a solvent spray; painting metal gears and pumps in spraybooth.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Miscellaneous metal parts coating booth	OAC rule 3745-21-09(U)(2)(e)(ii)	Maximum daily coating usage not to exceed 10 gallons of coating in any one day.
	OAC rule 3745-17-07 (A)	Visible particulate matter emissions shall not exceed twenty-percent opacity as a six-minute average, except as provided by the rule.
	OAC rule 3745-17-11	PE: 0.551 pound per hour

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall use dry filters whenever this emissions unit is in operation for the control of the overspray.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all of the coatings employed.
2. The permittee shall maintain daily records that document any time periods when the dry filters were not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. 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 45 days after the exceedance occurs.

IV. Reporting Requirements (continued)

2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record that documents any time periods when the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the occurrence.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:
Usage of no more than 10 gallons of coatings per day.

Applicable Compliance Method:

Daily records shall be maintained of the usage of all coatings employed, as required in Section A.III.1.

2. Emissions Limitation:
Twenty-percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03 (B)(1).

3. Emission Limitation: 0.551 pound of particulate emissions per hour.

Applicable Compliance Method:

To determine the actual worst case particulate emission rate, the following equation shall be used:

$$E = U \times (1-TE) \times (1-CE)$$

where,

E = particulate matter emissions rate (lbs/hr)

U = maximum coating solids usage 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 = fractional control efficiency of the control equipment

If required, emission testing shall be performed in accordance with the procedures in 40 CFR Part 60, Appendix A, Method 5.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Finishing Area Shotblast (P015)

Activity Description: Cleaning of castings using shot to blast the surface.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Finishing area shotblast with baghouse	OAC rule 3745-31-05(A)(3) PTI No. 02-8342	PE: 0.01 grain per dry standard cubic foot of exhaust gases, 0.45 pound per hour and 1.97 tons per year (stack emissions). The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07 (A).
	OAC rule 3745-17-07(A)	Visible particulate matter emissions shall not exceed twenty-percent opacity as a six-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

- Except for the initial loading of the filter media following a media change, 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

- The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviations (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 Limitations:
PE: 0.45 pound per hour and 0.01 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required by the Ohio EPA, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

2. Emissions Limitation:
1.97 tons per year of particulate emissions.

Applicable Compliance Method:

This limit is based on the allowable hourly emission limit (0.45 lb/hr) multiplied by the maximum possible operating hours (8760 hr/yr), and divided by 2000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation. Compliance was demonstrated with the hourly limit in the most recent compliance test conducted on September 28, 1999.

3. Emissions Limitation:
Twenty-percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Grinding Operations (P020)
Activity Description: Grinding of castings for final product finishing.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Grinding operations for gray iron castings with baghouse	OAC rule 3745-31-05(A)(3) PTI No. 02-12357	PE: 0.01 grain per dry standard cubic foot of exhaust gases, 1.07 pounds per hour, and 4.69 tons per year (stack emissions) Fugitive PE: 0.59 ton per year The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-17-07 (B), and 3745-17-08 (B).
	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack shall not exceed twenty-percent opacity, as a six-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible fugitive PE shall not exceed twenty-percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B) OAC rule 3745-17-11	See A.I.2.a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The collection efficiency of the baghouse control system 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.

II. Operational Restrictions

1. Except for the initial loading of the filter media following a media change, 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. The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop.
2. The permittee shall maintain annual records of the iron castings (tons) processed through this emissions unit.
3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) and any fugitive egress points 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 pressure drop deviations (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(s) and/or any fugitive egress points 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. Emissions Limitations:
PE: 1.07 pounds per hour and 0.01 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required by the Ohio EPA, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

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 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northeast District Office.
- 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 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 appropriate 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). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA, Northeast District Office.

2. Emissions Limitation:
4.69 tons per year of particulate emissions.

Applicable Compliance Method:

This limit is based on the allowable hourly emission limit (1.07 lb/hr) multiplied by the maximum possible operating hours (8760 hr/yr), and divided by 2000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation. Compliance was demonstrated with the hourly limit in the most recent compliance test conducted on September 28, 1999.

V. Testing Requirements (continued)

3. Emissions Limitation:
0.59 ton per year of fugitive particulate emissions

Applicable Compliance Method:

To determine the actual fugitive particulate emission rate for the grinding operations the following equation shall be used:

$$E = \text{gray iron processed (tons metal/yr)} \times 1.6 \text{ pounds PE/ton metal} \times (1 - 0.95) \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{fugitive particulate emissions (tons/yr)}$$

1.6 pounds particulate emissions/ton metal = emissions factor in pounds of particulate emissions per ton of gray iron processed (from Bernard S. Gutow article "An inventory of Iron Foundry Emissions", Modern Castings, January 1972).

0.95 = capture efficiency as supplied by the manufacturer

4. Emissions Limitation:
Twenty-percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03.

5. Emissions Limitation:
Twenty-percent opacity, as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation for the fugitive particulate matter emissions shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Dump Conveyor and Didion Shakeout (P030)

Activity Description: Mold transfer to shakeout (after the Autopour and Mold handler: pouring and cooling lines); sand and metal separation using a rotating shakeout drum; transfer of castings by forklift and storage in hoppers for cooling.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Didion shakeout and mold dump conveyor with baghouse	OAC rule 3745-31-05(A)(3) PTI No. 02-12422	PE: 0.01 grain per dry standard cubic foot of exhaust gases, 1.47 pounds per hour, and 6.44 tons per year (stack emissions). 7.03 tons per year of fugitive PE. 6.03 pounds per hour of organic compound emissions (total of stack and fugitive emissions) and 26.4 tons per year. 10.0 pounds per hour of carbon monoxide emissions (total of stack and fugitive emissions) and 4.4 tons per year. Visible PE from the stack shall not exceed five-percent opacity, as a six-minute average. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (B) and 3745-17-08 (B).
	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 3745-17-07(B)	Visible fugitive PE shall not exceed twenty-percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a.

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

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

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).

2. Additional Terms and Conditions

- 2.a** The collection efficiency of the baghouse control system 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.

II. Operational Restrictions

1. Except for the initial loading of the filter media following a media change, 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. The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop.
2. The permittee shall maintain annual records of the iron castings (tons) processed through this emissions unit.
3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) and any fugitive egress points serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
4. The permittee shall maintain daily records of the following information for this emissions unit.
- a. the maximum gray iron processed (tons/hr);
 - b. the daily emissions of organic compounds using the emission factor from A.V.4.;
 - c. the daily emissions of carbon monoxide using the emission factor from A.V.6.;
 - d. the total hours of operation;
 - e. the average hourly organic compound emissions; and
 - f. the average hourly carbon monoxide emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviations (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.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack(s) and/or any fugitive egress points 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.
3. The permittee shall submit deviations (excursion) reports that identify all periods of time during which the average hourly organic compound and carbon monoxide emissions exceeded the allowable emission limitations specified above.

V. Testing Requirements

1. Emissions Limitations:
PE: 1.47 pounds per hour and 0.01 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required by the Ohio EPA, compliance with the particulate emission rate shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

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 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northeast District Office.
- 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 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 appropriate 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). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA, Northeast District Office.

2. Emissions Limitation:
6.44 tons per year of particulate emissions.

Applicable Compliance Method:

This limit is based on the allowable hourly emission limit (1.47 lb/hr) multiplied by the maximum possible operating hours (8760 hr/yr), and divided by 2000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation. Compliance was demonstrated with the hourly limit in the most recent compliance test conducted on September 29, 1999.

V. Testing Requirements (continued)

- 3.** Emissions Limitation:
7.03 tons per year of fugitive particulate emissions

Applicable Compliance Method:

To determine the actual fugitive particulate emission rate for the Didion shakeout and mold dump conveyor the following equation shall be used:

$$E = \text{gray iron processed (tons metal/yr)} \times 3.2 \text{ pounds PE /ton metal} \times (1 - 0.99) \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{fugitive particulate emissions (tons/yr)}$$

3.2 pounds particulate emissions/ton metal = emissions factor in pounds of particulate emissions per ton of gray iron processed (from AP-42, Table 12.10-7, 1995 version).

0.99 = capture efficiency as supplied by the manufacturer

- 4.** Emissions Limitation:
6.03 pounds per hour organic compounds

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by record keeping required in Section A.III.4. To determine compliance with the organic compound limit, the following equation shall be used:

$$E = \text{maximum gray iron processed (tons/hr)} \times 1.2 \text{ pounds OC per ton iron}$$

where:

$$E = \text{organic compound emissions (lb/hr)}$$

1.2 pounds per ton = emission factor in pounds of organic compounds per ton of iron processed (from SCC emissions factor 30400332)

- 5.** Emissions Limitation:
26.4 tons per year of organic compounds

Applicable Compliance Method:

To determine compliance with the organic compound limit, the following equation shall be used:

$$E = \text{actual gray iron processed (tons/yr)} \times 1.2 \text{ pounds OC per ton iron} \times 1 \text{ ton}/2000 \text{ pounds}$$

where:

$$E = \text{organic compound emissions (tons/yr)}$$

1.2 pounds per ton = emission factor in pounds of organic compounds per ton of iron processed (from SCC emissions factor 30400332)

V. Testing Requirements (continued)

6. Emissions Limitation:
10.0 pounds per hour of carbon monoxide

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by record keeping required in Section A.III.4. To determine compliance with the carbon monoxide limit, the following equation shall be used:

$$E = \text{maximum gray iron processed (tons metal/hr)} \times 0.2 \text{ pound CO emissions/ton metal}$$

where:

$$E = \text{carbon monoxide emissions (lbs/hr)}$$

0.2 pounds CO emissions/ton metal = emissions factor in pounds of carbon monoxide per ton of gray iron processed (from emissions test done at a similar gray iron foundry source).

7. Emissions Limitation:
4.4 tons per year of carbon monoxide

Applicable Compliance Method:

To determine compliance with the carbon monoxide limit, the following equation shall be used:

$$E = \text{actual gray iron processed (tons metal/yr)} \times 0.2 \text{ pounds CO emissions /ton metal} \times (1 \text{ ton}/2000 \text{ pounds})$$

where:

$$E = \text{carbon monoxide emissions (tons/yr)}$$

0.2 pounds CO emissions/ton metal = emissions factor in pounds of carbon monoxide per ton of gray iron processed (from emissions test done at a similar gray iron foundry source).

8. Emissions Limitation:
Twenty-percent opacity, as a six-minute average., except as provided by the rule

Applicable Compliance Method:

Compliance with the allowable visible emission limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03.

9. Emissions Limitation:
Twenty-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for fugitive particulate matter emissions shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Foundry Area Shotblast (P033)

Activity Description: Casting cleaning equipment using shot to blast the surface.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Foundry area shotblast with a baghouse	OAC rule 3745-31-05(A)(3) PTI No. 02-1565	PE: 0.01 grain per dry standard cubic foot of exhaust gases (stack emissions). The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07 (A).
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed twenty-percent opacity as a six-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

- Except for the initial loading of the filter media following a media change, 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

- The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviations (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:
PE: 0.01 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required by the Ohio EPA, compliance with the particulate emission rate shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

2. Emissions Limitation:
Twenty-percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the allowable visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Charge Handling and Preheater (P036)

Activity Description: Truck unloading, scrap metal storage, and transporting scrap metal via an overhead magnetic crane to the preheater; transfer from the preheater to the charge bucket, then transfer to the furnaces.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Charge handling and preheater with cyclone collector	OAC rule 3745-31-05(A)(3) PTI No. 02-2145	PE: 0.04 grain per dry standard cubic foot of exhaust gases. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-17-07 (B), and 3745-17-08 (B).
	OAC rule 3745-17-07(A)	Visible PE shall not exceed twenty-percent opacity as a six minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible fugitive PE shall not exceed twenty-percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a. and A.I.2.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).

2. Additional Terms and Conditions

- 2.a Only non-oily scrap shall be charged to the preheater.
- 2.b All scrap materials must be processed within the building.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) and any fugitive egress points 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(s) and/or any fugitive egress points 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. Emissions Limitation:
PE: 0.04 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required by the Ohio EPA, compliance with the particulate emission rate shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

2. Emissions Limitation:
Twenty-percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03 (B)(1).

3. Emissions Limitation:
Twenty-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the charge handling and preheater operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sand Handling, Storage and Preparation (P901)

Activity Description: Transferring and mixing of return sand, new sand, bond & water to produce prepared green sand for moldmaking; Unloading new sand and bond from trucks and transferring to storage silos using a pneumatic conveyor.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ring muller, return sand conveyor, magnetic separator, bucket elevator, screening, return sand bin, feeder belt, prepared sand storage bin, belt conveyors, and distribution bins with baghouse (sand system baghouse)	OAC rule 3745-31-05(A)(3) PTI No. 02-1565	PE: 0.01 grain per dry standard cubic foot of exhaust gases from the baghouse. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-17-07 (B), and 3745-17-08 (B).
	OAC rule 3745-17-07(A)	See A.I.2.b. Visible PE from the stack shall not exceed twenty-percent opacity, as a six-minute average, except as provided by the rule.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)	Visible fugitive PE shall not exceed twenty-percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a.

2. Additional Terms and Conditions

- 2.a The collection efficiency of the baghouse control system 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.
- 2.b The following equipment shall be vented to the sand system baghouse: ring muller, return sand conveyor, magnetic separator, bucket elevator, screening, return sand bin, feeder belt, prepared sand storage bin, belt conveyors, and distribution bins.

II. Operational Restrictions

1. Except for the initial loading of the filter media following a media change, the pressure drop across the sand system 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. The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop.
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(s) and any fugitive egress points 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 pressure drop deviations (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(s) and/or any fugitive egress points 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. Emissions Limitations:
PE: 0.01 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required by the Ohio EPA, compliance with the particulate emission rate shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

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 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northeast District Office.
- 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 Ohio EPA, Northeast District Office.

V. Testing Requirements (continued)

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, 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 appropriate 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). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA, Northeast District Office.

3. Emissions Limitation:
Twenty-percent opacity as a six-minute average, except as provided by the rule

Applicable Compliance Method:

Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03.

4. Emissions Limitation:
Twenty-percent opacity, as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation for the fugitive particulate emissions shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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