



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

9/21/2010

Certified Mail

William Mozes
Ellwood Engineered Castings
7158 Hubbard Masury Road
Hubbard, OH 44425

Facility ID: 0278000025
Permit Number: P0085982
County: Trumbull

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Kevin Boyce," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northeast District Office



FINAL

**Division of Air Pollution Control
Title V Permit
for
Ellwood Engineered Castings**

Facility ID: 0278000025
Permit Number: P0085982
Permit Type: Renewal
Issued: 9/21/2010
Effective: 10/12/2010
Expiration: 10/12/2015



Division of Air Pollution Control
Title V Permit
for
Ellwood Engineered Castings

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements..... 3
3. Scheduled Maintenance..... 6
4. Risk Management Plans 6
5. Title IV Provisions 6
6. Severability Clause 7
7. General Requirements 7
8. Fees..... 8
9. Marketable Permit Programs..... 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 8
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 10
15. Operational Flexibility..... 10
16. Emergencies..... 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 11
19. Insignificant Activities or Emissions Levels..... 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 12
22. Permanent Shutdown of an Emissions Unit 12
23. Title VI Provisions 12
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 13
25. Records Retention Requirements Under State Law Only..... 13
26. Inspections and Information Requests 13
27. Scheduled Maintenance/Malfunction Reporting 14
28. Permit Transfers 14



- 29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 14
- B. Facility-Wide Terms and Conditions..... 15
- C. Emissions Unit Terms and Conditions 18
 - 1. F001, Ingot Mould Pouring 19
 - 2. F003, Charge Handling 21
 - 3. F004, Casting Shakeout..... 22
 - 4. F008, Scrap Preheater..... 27
 - 5. F009, Wire Inoculator..... 31
 - 6. F010, Didion sand system..... 37
 - 7. P008, Casting Finishing 42
 - 8. P009, Sand Handling 46
 - 9. P017, Mobile Continuous Mixer 49
 - 10. P018, Shot Blasting Replacement Unit..... 52
 - 11. R001, Paint Booth..... 56
 - 12. Emissions Unit Group - Engineered Castings: F005, F006, F007,..... 59
 - 13. Emissions Unit Group - Melt Shop: P012, P013, P014,..... 64

Authorization

Facility ID: 0278000025
Facility Description: Gray Iron Foundry
Application Number(s): A0016674, A0016675, A0016676
Permit Number: P0085982
Permit Description: Title V renewal
Permit Type: Renewal
Issue Date: 9/21/2010
Effective Date: 10/12/2010
Expiration Date: 10/12/2015
Superseded Permit Number: P0085981

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Ellwood Engineered Castings
7158 Hubbard Masury Road
Hubbard, OH 44425

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Chris Korleski
Director



A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

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

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

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

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

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

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northeast District Office.

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

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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

4. Risk Management Plans

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

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

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

5. Title IV Provisions

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

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

6. Severability Clause

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

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

7. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. Reopening for Cause

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

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

- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

12. Federal and State Enforceability

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

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

13. 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:
- (1) 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.
 - (2) 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.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
 - (2) 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.
 - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

14. Permit Shield

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

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

15. Operational Flexibility

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

or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

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

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

17. Off-Permit Changes

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by

law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

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

21. Air Pollution Nuisance

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

22. Permanent Shutdown of an Emissions Unit

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

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

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

25. Records Retention Requirements Under State Law Only

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.

26. 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.

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

27. 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).

28. 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.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) none
2. The permittee shall comply with the requirements contained within the most recent version of the following regulations that are applicable to the facility:
 - a) 40 CFR Part 63, Subpart EEEEE – National Emission Standard for Hazardous Air Pollutants: Iron and Steel Foundries. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Northeast District Office.
 - b) The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart EEEEE: F008, P012, P013, and P014.
 - c) All of the emissions units at this facility are subject to the facility-wide opacity limitation for fugitive emissions established in 40 CFR 63.7690(a)(7). However, the fugitive particulate emissions from the following emissions units at this facility are either subject to opacity limitations under OAC rules 3745-31-05(A)(3) or 3745-31-05(D), both of which are more stringent than or equivalent to the opacity limitations from 40 CFR 63.7690(a)(7): F004, F009, F010, F005, F006, and F007.
 - d) If required, compliance with the facility-wide opacity limitation for fugitive emissions established in 40 CFR 63.7690(a)(7) shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - e) The permittee shall comply with applicable work practice standards established in 40 CFR 63.7700. Use of scrap that may contain organic contaminants, plastics and HAP metals shall be minimized or eliminated. Accessible lead components and mercury switches shall be removed from any automotive bodies by suppliers.
3. The following insignificant emissions units are located at this facility:
 - P005 - Ladle Repair and Reline;
 - P016 - Alloy Additive System (PTI No. 02-835);
 - F011 – Scrap Cutting Operation; and
 - Z004 - Plant Roadways.

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

[Authority for term: OAC rule 3745-77-07(A)(13)]

4. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "DeMinimis" criteria established in OAC rule 3745-15-05:
- B001 - Pattern Shop Boiler;
 - Z007 – Heat Treat Oven;
 - P004 - Ladle Stopper Dry Oven;
 - T001 - Phenolic Resin Tank;
 - T002 - Resin Catalyst Tank;
 - T003 - Phenolic Resin Tank;
 - T004 - Resin Catalyst Tank; and
 - F012 – Spent Sand Staging Area.

C. Emissions Unit Terms and Conditions



1. F001, Ingot Mould Pouring

Operations, Property and/or Equipment Description:

Crane, flask, bar, ladle, ingot mould pouring, covers entire foundry pouring operations

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	See b)(2)a.
b.	OAC rule 3745-17-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

b. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

- g) Miscellaneous Requirements
 - (1) None.



2. F003, Charge Handling

Operations, Property and/or Equipment Description:

Handling of scrap iron prior to scrap preheater and coreless induction furnaces no. 1, 2, and 3

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Index, Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B).

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

b. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Monitoring and/or Recordkeeping Requirements

(1) None.

d) Reporting Requirements

(1) None.

e) Testing Requirements

(1) None.

f) Miscellaneous Requirements

(1) None.



3. F004, Casting Shakeout

Operations, Property and/or Equipment Description:

Removal of sand from casted moulds

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (PTI 02-22773)	See b)(2)a, b)(2)b, b)(2)c and d)(1).
b.	OAC rule 3745-17-07(B)	See b)(2)d.
c.	OAC rule 3745-17-08(B)	See b)(2)e.
d.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See c)(1), d)(2), and e)(1).
e.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
f.	OAC rule 3745-17-11(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).

(2) Additional Terms and Conditions

a. Particulate emissions (PE) shall not exceed 0.01 grain per dscf of exhaust gas, 8.6 pounds per hour, and 37.7 tons per year from the dust collector exhaust that services both F004 and F010. The pounds per hour and tons per year emission limitations are based on flow rate from the dust collector, as listed in the permit to install application.

b. Visible particulate fugitive emissions discharged to the atmosphere from the building or structure housing this emissions unit shall not exceed 20% opacity as a 6-minute average, except for one 6-minute average per hour that does not exceed 27% opacity.

- c. Visible particulate emissions from the dust collector exhaust serving this emissions unit shall not exceed 10% opacity as a 6-minute average.
- d. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) **Operational Restrictions**

- (1) The permittee shall prepare and operate at all times according to a written operation and maintenance plan for the capture and collection system and control device for this emissions unit.

This operation and maintenance plan shall be part of the facility's Title V renewal application. The plan shall be subject to approval by the Ohio EPA, and shall be a part of the facility's Title V permit.

(Authority for term: OAC rule 3745-31-05(D), 40 CFR Part 64, and OAC rule 3745-77-07(A)(1))

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The pressure drop across the baghouse shall be maintained either within the range established during a performance test that demonstrates compliance with the particulate emission limitations while the emissions unit is in operation or the range recommended by the manufacturer.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

- (2) 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, if applicable, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s). For each operating day, the permittee shall record the pressure drop across the baghouse on a daily basis.

(Authority for term: OAC rule 3745-31-05(D), 40 CFR Part 64, and OAC rule 3745-77-07(C)(1))

e) **Reporting Requirements**

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

(Authority for term: OAC rule 3745-31-05(D), 40 CFR Part 64, and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and condition shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate fugitive emissions discharged to the atmosphere from the building or structure housing this emissions unit shall not exceed 20% opacity as a 6-minute average, except for one 6-minute average per hour that does not exceed 27% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

Visible particulate emissions from the dust collector exhaust serving this emissions unit shall not exceed 10% as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

PE shall not exceed 0.01 grain per dscf of exhaust gases and 8.6 pounds per hour from the dust collector exhaust that serves emissions units F004 and F010, combined.

Applicable Compliance Method:

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

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

PE shall not exceed 37.7 tons per year from the dust collector exhaust that serves emissions units F004 and F010, combined.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined by the following equation:

$$PE = (\text{latest stack test outlet emissions rate in gr/dscf}) \times (\text{latest stack tested air volume in dscfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hrs/yr}) \times (\text{lb/7000 gr}) \times (\text{ton/2000 lbs})$$

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 6 months after issuance of the permit and thereafter, at approximately 2.5 year intervals starting with the date of the last test that showed compliance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulate emissions in the exhaust stream.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of the baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - e. 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).
 - f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.



4. F008, Scrap Preheater

Operations, Property and/or Equipment Description:

Scrap preheater and drying system used for preheating scrap iron prior to melting in induction furnaces no. 1, 2, and 3, loading into bucket for transfer

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-11(A), OAC rule 3745-17-07(A)(1) and 40 CFR Part 63, Subpart EEEEE.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart EEEEE.
d.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765)	PE shall not exceed 0.005 grain per dry standard cubic foot or total metal HAPs emissions shall not exceed 0.0004 grain per dry standard cubic foot of exhaust gases from the stack of the baghouse controlling this emissions unit.
e.	OAC rule 3745-17-07(B)	See b)(2)b.
f.	OAC rule 3745-17-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.



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

- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
c. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart EEEEE, including the following sections:

Table with 2 columns: Code and Description. Rows include 63.7700(e) work practice standards, 63.7710 operation and maintenance plan, 63.7720 startup, shutdown and malfunction plan, and 63.7733(a), (e), and (f) site specific operating limits for capture system.

(Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained either within the range established during a performance test that demonstrates compliance with the particulate emission limitations while the emissions unit is in operation or the range recommended by the manufacturer.

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

- (2) 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, if applicable, 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.

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

- (3) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart EEEEE, including the following sections: 63.7740, 63.7741, 63.7742, 63.7743, 63.7745, and 63.7752.

(Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

- (1) The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not

comply with the allowable range established in d)(1). The report shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) following the end of the quarter.

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

- (2) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA Northeast District Office as required pursuant to 40 CFR Part 63, Subpart EEEEE.

(Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

PE shall not exceed 0.005 grain per dry standard cubic foot or total metal HAPs emissions shall not exceed 0.0004 grain per dry standard cubic foot of exhaust gases from the stack of the baghouse controlling this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in f)(2) and the applicable sections of 40 CFR 63.7732(a) and (b).

(Authority for term: OAC rules 3745-15-04(A), 40 CFR Part 63, Subpart EEEEE, and OAC rule 3745-77-07(C)(1))

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

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

- b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulate emissions in the exhaust stream.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Method 5 of 40 CFR Part 60, Appendix A, for total metal HAPs, Method 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. Not later than 60 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 Offices refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. 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 60 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), 40 CFR Part 63.7750, and OAC rule 3745-77-07(C)(1))

g) **Miscellaneous Requirements**

- (1) None.



5. F009, Wire Inoculator

Operations, Property and/or Equipment Description:

Wire inoculator.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Particulate emissions (PE) shall not exceed 0.75 pound per hour and 3.3 tons per year from the baghouses controlling this emissions unit.</p> <p>Visible particulate emissions from the exhaust stacks serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p> <p>Visible particulate fugitive emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.</p> <p>See b)(2)c.</p>
b.	OAC rule 3745-31-05(D), as effective 12/1/06	<p>Particulate emissions (PE) shall not exceed 0.75 pound per hour and 3.3 tons per year from the baghouses controlling this emissions unit.</p> <p>Visible particulate emissions from the exhaust stacks serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p> <p>Visible particulate fugitive emissions from this emissions unit shall not exceed 20%</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		opacity as a 3-minute average. See b)(2)d.
c.	OAC rule 3745-17-07(B)	See b)(2)a.
d.	OAC rule 3745-17-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- b. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B.265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S.EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and U.S.EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S.EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits no longer apply.
- d. This rule paragraph applies once U.S.EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. Permit to Install 02-22699 for this air contaminant source takes into account the use of a total enclosure capture system and baghouse(s) control system for PE, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee.

c) Operational Restrictions

- (1) This emissions unit will be controlled by baghouses currently being used by an existing emissions unit. The baghouses shall have an interlock system on the dampers, such that only one of the emissions units venting to these baghouses may be operated at a time.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouses shall be maintained within the ranges either recommended by the manufacturer or established during the most recent performance test that demonstrated the emissions unit was in compliance.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

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

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

- (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 capture system and control system serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

The observance of visible emissions may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, compliance with the mass emission limitation and/or visible emission limitation shall be determined by performing mass emission tests and/or visible emission readings, using USEPA-approved methods and procedures.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

- (1) The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouses did not comply with the allowable range established in d)(1) above. The report shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) following the end of the quarter.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

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

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which both emissions units (F005 and F009), that vent to the baghouses sited in this permit, were operated simultaneously.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in b)(1) of these terms and condition shall be determined in accordance with the following method(s):

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-15-04(A))

b. Emission Limitation:

Visible particulate fugitive emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-15-04(A))

c. Emission Limitation:

PE shall not exceed 0.75 pound per hour and 3.3 tons per year from the baghouses controlling this emissions unit.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated using maximum wire throughput and the Ellwood Engineered Castings (EEC) specific emission factor contained in the permittee's permit application received on July 2, 2007.

$E(PE) = EEC\text{-specific emission factor (6.4 lbs PE/ton wire)} \times \text{maximum throughput (3.75 tons/hr)} \times (1 - \text{the overall control efficiency specified}) (1-0.98)$

Compliance with the annual emission limit shall be demonstrated by multiplying the allowable hourly emission rate (0.75 lb/hr) by 8670 hours/year and dividing by 2000 lbs/ton. Compliance with the tons per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

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

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1))

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing for this emissions unit shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulate emissions in the exhaust stream.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of each baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - e. 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).
 - f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

- (1) None.



6. F010, Didion sand system

Operations, Property and/or Equipment Description:

New Sand Coolers and Existing Shakeout with New Baghouse.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include OAC rules 3745-31-05(A), 3745-17-07(B), 3745-17-08(B), 3745-17-07(A), 3745-17-11(A), and 40 CFR Part 64 Compliance Assurance Monitoring (CAM).

(2) Additional Terms and Conditions

a. Particulate emissions (PE) shall not exceed 0.01 grain per dscf of exhaust gas, 8.6 pounds per hour, and 37.7 tons per year from the dust collector exhaust that serves emissions units F004 and F010, combined. The pounds per hour and tons per year emission limitations are based on a flow rate from the dust collector, as listed in the permit to install application.

PE attributable to emissions unit F010 is determined to be 9.5 tons per year from the dust collector exhaust. This is based on the facility's determination that approximately 25% of the flow to the dust collector is from the sand system.

b. Fugitive PE shall not exceed 30.25 tons per year from the Didion sand system.

- c. Visible particulate fugitive emissions discharged to the atmosphere from the building or structure housing this emissions unit shall not exceed 20% opacity as a 6-minute average, except for one 6-minute average per hour that does not exceed 27% opacity.
- d. Visible particulate emissions from the dust collector exhaust serving this emissions unit shall not exceed 10% opacity as a 6-minute average.
- e. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- f. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) The permittee shall prepare and operate at all times according to a written operation and maintenance plan for the capture and collection system and control device for this emissions unit.

This operation and maintenance plan shall be part of the facility's Title V renewal application. The plan shall be subject to approval by the Ohio EPA, and shall be a part of the facility's Title V permit.

(Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 64, and OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained either within the range established during a performance test that demonstrates compliance with the particulate emission limitations while the emissions unit is in operation or the range recommended by the manufacturer.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (2) 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, if applicable, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s). For each operating day, the permittee shall record the pressure drop across the baghouse on a daily basis.

(Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 64, and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

- (1) The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range established in d)(1) above.

(Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 64, and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and condition shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate fugitive emissions discharged to the atmosphere from the building or structure housing this emissions unit shall not exceed 20% opacity as a 6-minute average, except for one 6-minute average per hour that does not exceed 27% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

Visible particulate emissions from the dust collector exhaust serving this emissions unit shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

PE shall not exceed 0.01 grain per dscf of exhaust gases and 8.6 pounds per hour from the dust collector exhaust that serves emissions units F004 and F010, combined.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5.

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

PE shall not exceed 37.7 tons per year from the dust collector exhaust that serves emissions units F004 and F010, combined.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined by the following equation:

$PE = (\text{latest stack test outlet emissions rate in gr/dscf}) \times (\text{latest stack tested air volume in dscfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

Fugitive PE shall not exceed 30.25 tons per year from the Didion sand system.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined by the following equation:

$\text{fugitive PE} = 3.6 \text{ lbs PE/ton of sand} \times 67,200 \text{ tons sand/yr} \times 0.5 \times 0.5 \times (\text{ton}/2000 \text{ lb}) = 30.25 \text{ tons per year}$

where:

3.6 lbs PE/ton of sand = an uncontrolled emission factor from AP-42, Table 12.10-7;

67,200 tons of sand/yr = the maximum sand usage in the main foundry from the PTI application;

0.5 = the estimated 50% capture efficiency of the control system from the PTI application; and

0.5 = the estimated 50% control efficiency for fugitive emissions for the building enclosure from the PTI application.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

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

a. The emission testing shall be conducted within 6 months after issuance of the permit and thereafter, at approximately 2.5 year intervals starting with the date of the last test that showed compliance.

b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulate emissions in the exhaust stream.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of the baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. 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).
- f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

g) **Miscellaneous Requirements**

- (1) None.



7. P008, Casting Finishing

Operations, Property and/or Equipment Description:

Grinders and chippers with baghouse, mould finishing

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-17-07(A)(1), OAC rule 3745-17-11(B)(1), OAC rule 3745-17-07(B), and OAC rule 3745-17-08(B).

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

b. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

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

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range either recommended by the manufacturer or established during the most recent performance test that demonstrated the emissions unit was in compliance.

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

- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, if applicable, 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.

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

e) Reporting Requirements

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

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

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

PE shall not exceed 29.2 lbs/hr (using Fig.II) from the baghouse.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and OAC rule 3745-17-03(B)(10). See f)(2).

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

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing for this emissions unit 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(s) for particulate emissions.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of the baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - e. 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).
 - f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

- g) Miscellaneous Requirements
 - (1) None.



8. P009, Sand Handling

Operations, Property and/or Equipment Description:

Sand Handling system segments include 4 sand mixers, core/mold making, core baking (core and cheek ovens and associated combustion emissions), and sand silos with bin vents

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) shall not exceed 21.5 lbs/hr (using Fig.II).

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to the baghouses at all times the emissions unit is in operation.

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

c) Operational Restrictions

(1) none

d) Monitoring and/or Recordkeeping Requirements

(1) The pressure drop across the baghouses shall be maintained within the range either recommended by the manufacturer or established during the most recent performance test that demonstrated the emissions unit was in compliance.

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

(2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring

equipment shall be installed, calibrated, if applicable, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.

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

e) Reporting Requirements

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

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

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

PE emission shall not exceed 21.5 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 5 and OAC rule 3745-17-03(B)(10).

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

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

- a. The emission testing for this emissions unit 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(s) for particulate emissions.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of each baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. 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).
- f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

g) **Miscellaneous Requirements**

- (1) None.



9. P017, Mobile Continuous Mixer

Operations, Property and/or Equipment Description:

Sand mixer

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Row ID, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-31-05(A)(3), OAC rule 3745-17-11, and OAC rule 3745-17-07(A)(1).

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

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

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) The pressure drop across the baghouse shall be maintained within the range either recommended by the manufacturer or established during the most recent performance test that demonstrated the emissions unit was in compliance.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, if applicable, 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.

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

- (3) The permittee shall collect and record the following information each day for the line:
- the total sand used in the mobile mixer;
 - the total hours of operation of the mobile mixer; and
 - the average hourly particulate emissions.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

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

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

- (2) The permittee shall submit deviation (excursion) reports that identify each day during which the average hourly particulate emissions exceeded 2.3 pounds per hour.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

PE emissions shall not exceed 2.3 lbs/hr and 10.1 TPY.

Applicable Compliance Method:

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

$$E(PE) = (3.6 \text{ \#/ton})(S)(1-.95) / (H),$$

where:

E is the average hourly emission rate of particulate emissions (PE);

3.6 #/ton is the emission factor for PE in lb per ton of sand used, from AP-42, Table 12.10-4 (revised 1/1995);

S is the amount of sand used in this process per day, in tons;

H is the total hours this process operates per day; and

1-.95 is a factor based on the collector efficiency of 95%.

Yearly emissions shall be the sum of the daily emissions (where the daily emissions = $3.6 \times S \times 0.05$).

If required, compliance with the hourly limit shall be demonstrated as specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.



10. P018, Shot Blasting Replacement Unit

Operations, Property and/or Equipment Description:

Replacement Shot Blasting Unit with baghouses (two)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-13824)	Particulate emissions (PE) shall not exceed 7.2 lbs/hr and 31.3 tons/year* particulate emissions. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). *for purposes of PSD and OAC rule 3745-31-11 through 20, the tons per year particulate emissions are considered PM10.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stacks serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to the baghouses at all times the emissions unit is in operation.

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

c) Operational Restrictions

- (1) none

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across each baghouse shall be maintained within the range either recommended by the manufacturer or established during the most recent performance test that demonstrated the emissions unit was in compliance.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (2) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, if applicable, 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.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

PE emissions shall not exceed 7.2 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

PE emissions shall not exceed 31.3 tons/year.

Applicable Compliance Method:

To determine the maximum annual emission rate for particulate matter, the following equation shall be used:

$$E(PE) = [(17 \text{ lbs/ton})(35.8)(1 - .99)(8760)] / (2000)$$

where:

E = the maximum annual emission rate of PE;

17 lbs/ton = the emission factor for uncontrolled pm in lb per ton of castings throughput, from AP-42, Table 12.10-7 (revised 1/1995);

35.8 = the maximum hourly castings throughput weight used in this process, in tons;

1 - .99 = a correction for the collector efficiency of 99%;

8760 = the maximum hours of operation per year; and

2000 = the conversion factor for pounds to tons.

The permittee may also use the hourly mass emission rate for particulate matter as determined in f)(2).

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted approximately 2.5 years after permit issuance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Method 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of each

baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. 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).
- f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

- g) Miscellaneous Requirements
 - (1) None.



11. R001, Paint Booth

Operations, Property and/or Equipment Description:

Surface Coating (rust inhibitor) for automotive castings

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Emissions Unit, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. It lists four rows (a-d) detailing VOC and particulate emissions limits and applicable OAC rules.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

- b. the VOC content of each coating (excluding water and exempt solvents), as applied;
- c. the number of gallons of each coating and cleanup material employed; and
- d. the total VOC emissions from all coating and cleanup material employed, in pounds.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

VOC emissions shall not exceed 3.5 pounds per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1). In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

(Authority for term: OAC rule 3745-21-04(B)(5), OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- b. Emission Limitation:

PE shall not exceed 0.551 lb per hour.

Applicable Compliance Method:

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

$PE = \text{maximum coating solids usage rate (in pounds per hour)} \times (1-TE) \times (1-CE)$

where:

PE = particulate emissions rate (lb/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; and

CE = control efficiency of the control equipment.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

VOC emissions shall not exceed 4.6 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly VOC emissions from the record keeping requirements specified in d)(1) for the calendar year.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.



12. Emissions Unit Group - Engineered Castings: F005, F006, F007,

EU ID	Operations, Property and/or Equipment Description
F005	Sand Reclamation System - vibrating lump reducer (Lump Crusher)
F006	Sand Reclamation System - fluid bed type classifier and magnetic separator (Cooler Classifier)
F007	Sand Reclamation System - de-dusting chamber with baffle plates to scrub sand grains from remaining resin and ash (Scrubber)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-14399)	Particulate emissions (PE) shall not exceed 0.03 grain per dry standard cubic feet of exhaust gases and 2.3 pounds per hour from the baghouse stack(s) associated with these emissions units. Visible particulate fugitive emissions from these emissions units shall not exceed 20% opacity as a 3-minute average.
b.	OAC rule 3745-31-05(D)	PE shall not exceed 4.8 tons per year from each emissions unit. See c)(1).
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from the bughouse exhaust stack(s) serving these emissions units shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A).
e.	OAC rule 3745-17-07(B)	See b)(2)b.
f.	OAC rule 3745-17-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The emissions from each of the above listed emissions unit shall be vented to the baghouse(s) at all times the emissions unit is in operation.
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- c. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) The maximum annual operating hours for each emissions unit shall not exceed 4160 hours. Compliance with the annual operating hours limitation shall be based upon a rolling, 12 month summation of the operating hours.

(Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse(s) shall be maintained either within the range established during a performance test that demonstrates compliance with the particulate emission limitations while the emissions unit is in operation or the range recommended by the manufacturer.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1))

- (2) The permittee shall operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, if applicable, 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(s) on a daily basis.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (3) The permittee shall perform weekly checks, when the emissions unit(s) is in operation and when the weather conditions allow, for any visible emissions from the stack(s) and fugitive egress point(s) 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. whether the emissions are representative of normal operations;
- b. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- c. the total duration of any visible emissions incident; and
- d. any corrective action(s) taken to minimize or eliminate the visible emissions.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (4) The permittee shall maintain monthly records of the operating hours for each emissions unit.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit annual reports that identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

Visible particulate fugitive emissions from each emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

PE shall not exceed 2.3 lbs/hr and 0.03 gr/dscf from the baghouse stack(s) controlling each emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

PE shall not exceed 4.8 tons per year from each emissions unit.

Applicable Compliance Method:

To determine the maximum annual emission rate for particulate matter, the following equation shall be used:

$$E(PE) = ER \times HR / 2000$$

where:

E(PE) = the maximum annual emission rate of PE;

ER = the hourly mass emission rate for PE as determined in the most recent performance test that demonstrated the emissions unit was in compliance;

HR = the annual hours of operation of this emissions unit; and

2000 = the conversion factor for pounds to tons.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

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

a. The emission testing shall be conducted approximately 2.5 years after permit issuance for the north baghouse. Emission testing for the south baghouse and

the Cantonese baghouse shall be conducted within 6 months prior to permit expiration.

- b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulate emissions in the exhaust stream.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Method 5 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of each baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit(s) is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. 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).
- f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

- (1) None.

13. Emissions Unit Group - Melt Shop: P012, P013, P014,

EU ID	Operations, Property and/or Equipment Description
P012	Brown-Boveri IS-22/16 Coreless Induction Furnace No. 1 used for melting scrap iron
P013	Brown-Boveri IS-22/16 Coreless Induction Furnace No. 2 used for melting scrap iron
P014	Brown-Boveri IS-22/16 Coreless Induction Furnace No. 3 used for melting scrap iron

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack(s) serving each emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
b.	40 CFR Part 63, Subpart EEEEE [63.7690(a)(1)]	Particulate emissions (PE) shall not exceed 0.005 grain per dry standard cubic foot or total metal HAPs emissions shall not exceed 0.0004 grain per dry standard cubic foot of exhaust gases from the stack of the baghouse controlling these emissions units.
c.	OAC rule 3745-17-11(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart EEEEE.
d.	OAC rule 3745-31-05(A)(3) (PTI 02-835)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-11(A), OAC rule 3745-17-07(A)(1) and 40 CFR Part 63, Subpart EEEEE.

(2) Additional Terms and Conditions

a. The emissions from each emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

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

c) Operational Restrictions

- (1) Only two electric induction furnaces shall be operated simultaneously for scrap melting.

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

- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart EEEEE, including the following sections:

63.7710	operation and maintenance plan
63.7720	startup, shutdown and malfunction plan
63.7733(a), (e), and (f)	site specific operating limits for capture system

(Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range either recommended by the manufacturer or established during the most recent performance test that demonstrated the emissions unit was in compliance.

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

- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit(s) is/are in operation. The monitoring equipment shall be installed, calibrated, if applicable, 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.

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

- (3) The permittee shall keep a daily log of the melt shop schedule, identifying the furnaces being used.

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

- (4) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart EEEEE, including the following sections: 63.7740, 63.7741, 63.7742, 63.7743, 63.7745, and 63.7752.

(Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

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

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

- (2) The permittee shall submit deviation (excursion) reports that identify all periods of time during which all three electric induction furnaces are operated simultaneously for melting scrap.

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

- (3) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA Northeast District Office as required pursuant to 40 CFR Part 63, Subpart EEEEE.

(Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the exhaust stack(s) serving these emissions units shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rules 3745-15-04(A), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

PE shall not exceed 0.005 grain per dry standard cubic foot or total metal HAPs emissions shall not exceed 0.0004 grain per dry standard cubic foot of exhaust gases from the stack of the baghouse controlling this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in f)(2) and the applicable sections of 40 CFR 63.7732(a) and (b).

(Authority for term: 40 CFR Part 63, Subpart EEEEE, and OAC rule 3745-77-07(C)(1))

- (2) The permittee shall conduct, or have conducted, emission testing for each emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted at approximately 2.5 year intervals starting with the date of the last test that showed compliance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of particulate emissions in the exhaust stream.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Method 5 of 40 CFR Part 60, Appendix A, for total metal HAPs, Method 29 of 40 CFR Part 60, Appendix A. Emission tests shall be performed at the outlet of the baghouse serving this emissions unit. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions units are operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office. The testing shall be conducted during daylight hours to allow for visible emission evaluations to be performed concurrently.
 - e. Not later than 60 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).
 - f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. 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 Ohio EPA Northeast District Office.

(Authority for term: OAC rules 3745-15-04(A), 40 CFR Part 63.7750, and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

- (1) None.