Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

9/12/2011

Certified Mail

Facility ID: 1431073342
Permit Number: P0107185
County: Hamilton

Mr. Farley Houston
Cast-Fab Technologies, Inc.
3040 Forrer Street
Cincinnati, OH 45209-1016

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 Josh Mandel," 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 Hamilton County Dept. of Environmental Services. 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

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Hamilton County Dept. of Environmental Services

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Title V Permit
for
Cast-Fab Technologies, Inc.

Facility ID:	1431073342
Permit Number:	P0107185
Permit Type:	Renewal
Issued:	9/12/2011
Effective:	10/3/2011
Expiration:	10/3/2016

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
Cast-Fab Technologies, Inc.

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 7
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 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting 15
28. Permit Transfers 15

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15
B. Facility-Wide Terms and Conditions 16
C. Emissions Unit Terms and Conditions 21
1. B002, 6.0 MMBtu/hr Annealing Furnace 22
2. F014, Inoculation Process 24
3. F022, Charge/Scrap Handling 29
4. F023, Medium Mold Mixer & Mold-making with associated drying oven 32
5. F024, Large Mold Mixer & Mold-Making 37
6. F025, Large Mold Mixer & Mold-making 42
7. F026, Small Core Mixer & Core making 47
8. K001, Fabrication Coating Line 1 52
9. K003, Foundry Coating Line 1 with waterwash 59
10. N001 Thermal Sand Reclamation Unit 65
11. P014, Medium Mold Line Abrasive Clean 73
12. P015, Large Mold Line Abrasive Clean 77
13. P016, Small Mold Line Abrasive Clean 81
14. P026, Pneumatic Sand Handling System 85
15. P029, Small/Medium Line Grinding Booths 91
16. P030, Small Mold Line Casting Shakeout 96
17. P031, Medium Mold Line Casting Shakeout 101
18. P032, Large Mold Line Casting Shakeout 106
19. P034, Swing Grinding 111
20. P036, Small Mold Line Mold-making and Sand Preparation 114
21. P038, Sand Reclamation 119
22. P039, 9.6 MMBtu/hr natural gas fired Scrap Preheater 125
23. Hot Metal Transfer, F013 128
24. P037 Large Core Sand and Binder Mixers 131
25. P040 Medium Mold Line Release Agent 134
26. P041, Large Mold Line Release Agent 136
27. P042, Small Core and Mold Release Agent 138
28. Emissions Unit Group - Electric Induction Furnaces: F015 and F016 140
29. Electric Induction Furnace: F018 145
30. Emissions Unit Group - Mold Pouring and Cooling Lines: F019, F020, F021, ... 150
31. Emissions Unit Group - Spray Booths: K006, K010, K011, K017 153

Authorization

Facility ID: 1431073342
Facility Description: Iron Foundry and Sheet Metal Manufacturing Plant
Application Number(s): A0040575
Permit Number: P0107185
Permit Description: Renewal Title V permit for an Iron Foundry and Sheet Metal Manufacturing Plant, which includes several core and mold mixing and making, inoculation, charging/scrap handling, spray painting booth, thermal sand reclamation, abrasive cleaning, sand handing, casting shakeout, grinding, sand preparation, hot metal transfer, mold release, furnace, pouring and cooling operations, along with roadways and parking areas, a cold cleaner, storage tank, a wood pattern shop and welding and machining operations.
Permit Type: Renewal
Issue Date: 9/12/2011
Effective Date: 10/3/2011
Expiration Date: 10/3/2016
Superseded Permit Number: P0098786

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

Cast-Fab Technologies, Inc.
3040 Forrer Street
Cincinnati, OH 45209-1016

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

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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 Hamilton County Dept. of Environmental Services. 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

Scott J. Nally
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 Hamilton County Dept. of Environmental Services.

(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 contaminent 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

thepermittee 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:

   None.

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

EU ID	Operations, Property and/or Equipment Description
P035	Core-Mold sand unloading
T001	3,510 Binder resin fixed roof storage tank No.1
T002	3,510 Binder resin fixed roof storage tank No.2
F027	Roadways and parking areas
L001	Non-halogenated cold cleaner
F028	Machining Operations
F029	Maintenance Welding Operations
F030	Fabrication Welding Operations
F031	Fabrication Welding Operations
F032	Wood Pattern Shop

Each insignificant emissions unit at this facility must comply with all applicable Ohio EPA and federal regulations, as well as any emission limitations and/or control requirements contained within a 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 SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

3. The following emissions units contained in this permit are subject to 40 CFR Part 63,Subpart EEEEE—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries:F013, F014, F015, F016, F018, F019, F020, F021, F022, F023, F024, F025, F026, P026, P029, P030, P031, P032, P035, P036, P038, P037, P039. The complete NESHAP requirements, including the NESHAP 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 appropriate Ohio EPA District office or local air agency.

4. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart EEEEE. The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart EEEEE. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart EEEEE and Subpart A.

5. For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, the permittee shall not discharge any fugitive emissions to the atmosphere from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

6. The permittee shall conduct performance tests to demonstrate compliance with the opacity limit in B.5. no less frequently than once every 6 months.

   a) To determine compliance with the opacity limit in B.5. for fugitive emissions from buildings or structures housing any iron and steel foundry emissions source at the iron and steel foundry, follow the procedures in paragraphs 6.a)(1) and 6.a)(2) below.

(1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and 40 CFR 63.6(h)(5). The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.

(2) During testing intervals when PM performance tests, if applicable, are being conducted, conduct the opacity test such the opacity observations are recorded during the PM performance tests.

7. As required in 40 CFR 63.7751, the permittee shall submit semi-annual compliance reports. The first semiannual report shall be submitted July 31 of each year and cover the period from January 1st-June 30th of that year. The second semiannual report shall be submitted January 31 of each year and cover the period from July 1st-December 31th from the preceding year.

a) Each compliance report must include the information specified in paragraphs 7.a)(1) through (3) of this section and, as applicable, paragraphs 7.a)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in 40 CFR 63.10(d)(5)(i).

(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by 40 CFR 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs a)(1) through (4) and a)(7)a. and b.of this section. This requirement includes periods of startup, shutdown, and malfunction.

a. The total operating time of each emissions source during the reporting period.

b. Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.

(8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this 40 CFR 63 Subpart EEEEE, you must include the information specified in paragraphs a)(1) through 4) and a)(8)(a) through (k) of this section. This requirement includes periods of startup, shutdown, and malfunction.

a. The date and time that each malfunction started and stopped.

b. The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

c. The date, time, and duration that each continuous monitoring system was out-of-control, including the information in 40 CFR 63.8(c)(8).

d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

e. A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

f. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.

g. A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

h. A brief description of the process units.

i. A brief description of the continuous monitoring system.

j. The date of the latest continuous monitoring system certification or audit.

k. A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

b) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan and the source exceeds any applicable emissions limitation in

40 CFR 63.7690, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of 40 CFR 63.10(d)(5)(ii).

c) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.

C. Emissions Unit Terms and Conditions

1. B002, 6.0 MMBtu/hr Annealing Furnace

Operations, Property and/or Equipment Description:

6.0 MMBtu/hrdirect fired furnace fueled by natural gas

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 operation(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 are identified below. 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 3745-17-11(B)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	40 CFR Part 63, Subpart DDDDD 40 CFR Part 63, Subpart DDDDD-National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.	See b)(2)c.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon

being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

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. F014, Inoculation Process

Operations, Property and/or Equipment Description:

Inoculation of ductile and gray 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 operation(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 are identified below. 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 14-01821) Netting Determination to avoid the requirements of the Prevention of Significant Deterioration (PSD) program.	Particulate Emissions (PE) shall not exceed 8.26 TPY. See c)(1) and c)(2).
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a fugitive dust source at an existing iron foundry]	See Facility-Wide Section B.5.for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reportingrequirements.
e.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of low emission ladles for 85% of iron throughput.

c) Operational Restrictions

(1) A minimum of 85% of the total production in this emissions unit shall be conducted using the Tundish ladles.

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

(2) The maximum amount of iron throughput shall not exceed the following:

a. open porous plug ladles (uncontrolled): 207 tons/month and 2,487 tons/year;

b. tundishladles (controlled): 2,916 tons/month and 35,000 tons/year; and

c. totalproduction 3,123 tons/month and 37,487 tons/year.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information on a monthly basis:

a. the amount of iron, in tons, handled by the Tundish ladles;

b. the amount of iron, in tons, handled by the open porous plug ladles;

c. the monthly percentage of the amount iron handled by the Tundish ladles; and

d. the year-to-date totals of the information recorded in d)(1)a. - d)(1)c.

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

(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-01821: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedences of the production limitations specified c)(1) or c)(2).

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-01821: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

8.26 TPY of PE.

Applicable Compliance Method:

Compliance with production limitations specified in c)(2) ensures compliance with the 8.26 TPY PE limitation based on an emission factor of 3.9 lbsof PE/ton iron from RACM Table 2.7-1 and a 95% control efficiency for the Tundish ladles.

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

c. Production Limitation:

See c)(2).

Applicable Compliance Method:

Compliance may be demonstrated by the information recorded in on d)(1).

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-01821: f)(1).The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

3. F022, Charge/Scrap Handling

Operations, Property and/or Equipment Description:

Charge/Scrap Handling

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 operation(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 are identified below. 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)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a segregated scrap storage area, bin, or pile at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements. See d)(2).
d.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the implementation of good housekeeping practices and compliance with the requirements of 40 CFR Part 63 Subpart EEEEE specified in d)(2).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) For each segregated scrap storage area, bin or pile, you must either comply with the certification requirements in (2)a.below, or prepare and implement a plan for the selection and inspection of scrap according to the requirements in 40 CFR 63.7700(c).The permitteehas elected to comply with (2)a below.

a. The permittee must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. For the purpose of this paragraph, “free organic liquids” is defined as material that fails the paint filter test by EPA Method 9095A, “Paint Filter Liquids Test” (Revision 1, December 1996), as published in EPA Publication SW–846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (incorporated by

reference—see 40 CFR 63.14). Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, chlorinated plastics, or free organic liquids can be included in this certification.

Authority for term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.7700(a)-(c))

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) The permittee shall note any periods of non-compliance with the Work Practice Standards detailed in d)(2) above in the semi-annual compliance report required in Section B.7 of the Facility Wide Terms and Conditions.

Authority for term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.7751))

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

g) Miscellaneous Requirements

(1) None.

4. F023, Medium Mold Mixer & Mold-making with associated drying oven

Operations, Property and/or Equipment Description:

Medium mold mixer and mold making (Fordath 450) with associated drying oven (less than 4 MMBtu/hr fired by natural gas)

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 operation(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 are identified below. 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 14-04803)	Particulate emissions (PE) and Particulate matter with a diameter of 10 microns or less (PM-10) shall not exceed: 0.82 lb/day; and 0.15 TPY. Organic Compound (OC) emissions shall not exceed the following: 1.65 lbs/hr; 39.6 lbs/day; and 7.21 TPY OC. The emission limitations noted above are based upon the emissions unit's potential to emit (PTE). Therefore, no hourly, daily, or annual records are required to demonstrate compliance with these limits.
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	OAC rule 3745-21-07(G)	The emission limitations established in OAC rule 3745-21-07(G) are less stringent than those established under OAC rule 3745-31-05(A)(3). See b)(2)(b).
e.	40 CFR Part 63, Subpart EEEEE	See Facility-Wide Section B.5. for the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a mold making line not vented to a conveyance at an existing iron foundry]	facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure and compliance with the fugitive visible emission limitations.

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following term and condition shall become void after U.S. EPA approves the rule revision: b)(1)d.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. Once U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan, this emissions unit will not be subject to any of the applicable provisions listed in the revised OAC rule 3745-21-07.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions

unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-04803: d)(1). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-04803: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

0.82 lbof PE/PM10/day and 0.15 TPYof PE/PM10.

Applicable Compliance Method:

The lb/day emission limitation was established to reflect the potential to emit for the emissions unit and was based on emission factor of 0.04 lbof PE/ton castings (from RACM Table 2.7-1) and by a control efficiency of (1-.70) for the building enclosure. Compliance with the daily PE emission limitation ensures compliance with the TPY emission limitation.

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

c. Production Limitation:

1.65 lbsof OC/hr, 39.6 lbsof OC/day, and 7.21 TPY of OC.

Applicable Compliance Method:

The lbs/hr emission limitation was established to reflect the potential to emit for the emissions unit based on an emission factor of 0.176 lb OC/ton sand (Borden Chemicals emission factor submitted with PTI 14-04803). Compliance with the lbs/hr emission limitation ensures compliance with the lbs/day and TPY emission limitation.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04803: f)(1).The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

5. F024, Large Mold Mixer & Mold-Making

Operations, Property and/or Equipment Description:

Large mold mixer and mold making (Fordath 900) with three (3) associated drying ovens (less than 4 MMBtu/hr fired by natural gas)

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 operation(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 are identified below. 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 14-04803)	Particulateemissions (PE) and Particulate matter with a diameter of 10 microns or less (PM-10) shall not exceed: 1.27 lbs/day; and 0.23 TPY. Organic Compound (OC) emissions shall not exceed the following: 1.65 lbs/hr; 39.6 lbs/day; and 7.21 TPY OC. The emission limitations noted above are based upon the emissions unit's potential to emit (PTE). Therefore, no hourly, daily, or annual records are required to demonstrate compliance with these limits.
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	OAC rule 3745-21-07(G)	The emission limitations established in OAC rule 3745-21-07(G) are less stringent than those established under OAC rule 31-05(A)(3). See b)(2)(b).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a mold making line not vented to a conveyance at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure.

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following term and condition shall become void after U.S. EPA approves the rule revision: b)(1)d.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. Once U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan, this emissions unit will not be subject to any of the applicable provisions listed in the revised OAC rule 3745-21-07.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions

unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-04803: d)(1). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-04803: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

1.27 lbs PE/PM10/day and 0.23 TPY of PE/PM10

Applicable Compliance Method:

The lb/day emission limitation was established to reflect the potential to emit for the emissions unit and was based on emission factor of 0.04 lb PE/ton castings (from RACM Table 2.7-1) and by a control efficiency of (1-.70) for the building enclosure. Compliance with the daily PE emission limitation ensures compliance with the TPY emission limitation.

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

c. Production Limitation:

1.65 lbs of OC/hr, 39.6 lbs of OC/day, and 7.21 TPY of OC.

Applicable Compliance Method:

The lbs/hr emission limitation was established to reflect the potential to emit for the emissions unit based on an emission factor of 0.176 lb OC/ton sand (Borden Chemicals emission factor submitted with PTI 14-04803). Compliance with the lbs/Hr emission limitation ensures compliance with the lbs/day and TPY emission limitation.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04803: f)(1).The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

6. F025, Large Mold Mixer & Mold-making

Operations, Property and/or Equipment Description:

Large mold mixer and mold making (Palmer 200)

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 operation(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 are identified below. 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 14-04803)	Particulate emissions (PE) and Particulate matter with a diameter of 10 microns or less (PM-10) shall not exceed: 0.82 lbs/day; and 0.15 TPY. Organic Compound (OC) emissions shall not exceed the following: 1.06 lbs/hr; 25.44 lbs/day; and 4.63 TPY OC. The emission limitations noted above are based upon the emissions unit's potential to emit (PTE). Therefore, no hourly, daily, or annual records are required to demonstrate compliance with these limits.
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	OAC rule 3745-21-07(G)	The emission limitations established in OAC rule 3745-21-07(G) are less stringent than those established under OAC rule 3745-31-05(A)(3). See b)(2)(b).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a mold making line not vented to a conveyance at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure.

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following term and condition shall become void after U.S. EPA approves the rule revision: b)(1)d.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. Once U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan, this emissions unit will not be subject to any of the applicable provisions listed in the revised OAC rule 3745-21-07.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions

unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-04803: d)(1). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-04803: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

0.82 lbsof PE/PM10/day and 0.15 TPY of PE/PM10.

Applicable Compliance Method:

The lb/day emission limitation was established to reflect the potential to emit for the emissions unit and was based on emission factor of 0.04 lbof PE/ton castings (from RACM Table 2.7-1) and by a control efficiency of (1-.70) for the building enclosure. Compliance with the daily PE emission limitation ensures compliance with the TPY emission limitation.

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

c. Production Limitation:

1.06 lbsof OC/hr, 25.44 lbsof OC/day, and 4.63 TPY of OC.

Applicable Compliance Method:

The lbs/hr emission limitation was established to reflect the potential to emit for the emissions unit based on an emission factor of 0.176 lb OC/ton sand (Borden Chemicals emission factor submitted with PTI 14-04803). Compliance with the lbs/Hr emission limitation ensures compliance with the lbs/day and TPY emission limitation.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04803: f)(1).The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

7. F026, Small Core Mixer &Core making

Operations, Property and/or Equipment Description:

Small core mixer and core making (Pepset)

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 operation(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 are identified below. 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 14-04803)	Particulate emissions (PE) and Particulate matter with a diameter of 10 microns or less (PM-10) shall not exceed: 3.36 lbs/day; and 0.42 TPY. Organic Compound (OC) emissions shall not exceed the following: 1.65 lbs/hr; 39.57 lbs/day; and 5.0 TPY OC. See c)(1). The lbs/hr and lbs/day emission limitations noted above are based upon the emissions unit's potential to emit (PTE). Therefore, no hourly or daily records are required to demonstrate compliance with these limits.
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	OAC rule 3745-21-07(G)	The emission limitations established in OAC rule 3745-21-07(G) are less stringent than those established under OAC rule 31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)(b).
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a core making line not vented to a conveyance at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure.

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following term and condition shall become void after U.S. EPA approves the rule revision: b)(1)d.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. Once U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan, this emissions unit will not be subject to any of the applicable provisions listed in the revised OAC rule 3745-21-07.

c) Operational Restrictions

(1) The maximum annual core production shall not exceed 8,000 tons per year.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) The permittee shall collect and record the following information on a monthly basis:

a. the core production rate for the calendar month; and

b. the year-to-date core production rate.

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-04803: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) The permitee shall submit a report to the Hamilton County Department of Environmental Services for any exceedance of the core production limitation of 8,000 tons per year. This report shall be submitted within 45 days of the exceedance.

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-04803: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

3.36 lbsof PE/PM10/day and 0.42 TPY of PE/PM10.

Applicable Compliance Method:

The lb/day emission limitation was established to reflect the potential to emit for the emissions unit and was based on emission factor of 0.35lbof PE/ton core produced (from RACM Table 2.7-1) and by a control efficiency of (1-.70) for the building enclosure. Compliance with the TPY emission limitation is ensured by compliance with the operational restriction of 8,000 tons of core per year.

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

c. Production Limitation:

1.65 lbs of OC/hr, 39.57 lbs of OC/day, and 5.0 TPY of OC.

Applicable Compliance Method:

The lbs/hr emission limitation was established to reflect the potential to emit for the emissions unit based on an emission factor of 1.249lbof OC/ton sand (1997 OCMA Vender Study emission factor submitted with PTI 14-04803). Compliance with the lbs/hr emission limitation ensures compliance with the lbs/day emission limitation. Compliance with the TPY emission limitation is ensured by compliance with the operational restriction of 8,000 tons of core per year.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04803: f)(1).The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

8. K001, Fabrication Coating Line 1

Operations, Property and/or Equipment Description:

Spray and Powder Coating booths with fabric filter

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 operation(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 are identified below. 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 3745-21-09(U)(1)(c)	The volatile organic compound (VOC) content of the coatings employed shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents based on a daily volume weighted average.
b.	OAC Rule 3745-17-11(C)	See c)(1)&(2) below.
c.	40 CFR Part 63, Subpart MMMM (40 CFR 63.3880-63.3981) [In accordance with 40 CFR 63.3890(b)(1) this existing affected source and is complying with the MACT through the provisions allowed for under the "Emission rate without add-on controls option"]	The organic HAP emissions from the existing general use coatings operation shall not exceed 2.6 lbs/gal of coating solids used during each rolling, 12-month period. See b)(2)a.
d.	40 CFR 63.1-15 (40 CFR 63.3901)	As specified in 40 CFR 63.3901, Table 2 to 40 CFR Part 63, Subpart MMMM - Applicability of 40 CFR Part 63 General Provisions to Subpart MMMM, shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. The permittee has chosen to demonstrate compliance with the organic HAP emission limitation using the "Emission rate without add-on controls option" as provided for in 40 CFR 63.3891(b). As such the permittee shall demonstrate that,

based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in 40 CFR 63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(Authority for term: OAC rules 3745-17-11(C)(1) & (2)(b) and 3745-77-07(A)(1))

(2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

(Authority for term: OAC rules 3745-17-11(C)(1) & (2)(b) and 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee, having chosen to demonstrate compliance by means of a daily volume-weighted average VOC content, shall collect and record the following information each day for the coating line:

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

b. the mass of VOC per volume of coating (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each coating, as applied; and

c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for $C_{VOC,2}$, as follows:

$$(C_{VOC,2})_A = \sum_{i=1}^{n} C_{VOC,2i} L_{Ci} (V_{Si} + V_{VOCi}) \Big/ \sum_{i=1}^{n} L_{Ci} (V_{Si} + V_{VOCi})$$

where:

$(C_{VOC,2})_A$ is the daily volume-weighted average VOC content of all coatings, as applied.

$C_{VOC,2}$ is the VOC content in pounds of VOC per gallon of coating, excluding water and exempt solvents calculated as follows:

$C_{VOC,2} = (D_C)(W_{VOC}) / V_S + V_{VOC}$

D_C = density of coating, in pounds of coating per gallon of coating.

$W_{VOC} = W_{VM} - W_W - W_{ES}$

V_S = the volume fraction of solids in coating, in gallons of solids per gallon of coating.

$V_{VOC} = V_{VM} - V_W - V_{ES}$

W_{VM} = weight fraction of volatile matter in coating, in pound of volatile matter per pound of coating.

W_W = weight fraction of water in coating, in pound of water per pound of coating.

W_{ES} = weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating.

V_{VM} = volume fraction of volatile matter in coating, in gallon of volatile matter per gallon of coating.

V_W = volume fraction of water in coating, in gallon of water per gallon of coating.

V_{ES} = volume fraction of exempt solvent in coating, in gallon of exempt solvent per gallon of coating.

A = subscript denoting that the indicated VOC content is a weighted average of the coatings employed during time period “t”.

L_C = liquid volume of coating employed during time period “t”, in gallons of coating.

M_C = mass of coating employed during the time period “t”, in pounds of coating.

i = subscript denoting a specific coating employed during time period “t”.

n = total number of coatings employed during time period “t”.

t = time period specified for the weighted average VOC content is per day and not included in the calculation.

(Authority for term: OAC rules 3745-21-09(B)(3)(h) and 3745-77-07(C)(1))

(2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(a) and 3745-77-07(C)(1))

(3) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(c) and 3745-77-07(C)(1))

(4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

(Authority for term: OAC rules 3745-17-11(C)(2)(c) and 3745-77-07(C)(1))

(5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

a. the date of the inspection;

b. a description of each/any problem identified and the date it was corrected;

c. a description of any maintenance and repairs performed; and

d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(d) &(f) and 3745-77-07(C)(1))

(6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(e),(f), and (g) and 3745-77-07(C)(1))

(7) To demonstrate ongoing compliance with the organic HAP emission limitation in b)(1)c, the permittee shall perform the calculations in 40 CFR 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. The permittee shall collect and record these calculations on a monthly basis.

If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in b)(1)c., this is a deviation from the emission limitation for the compliance period and must be reported as specified in 40 CFR 40 CFR 63.3910(c)(6) and 63.3920(a)(6).

As part of each semiannual compliance report required by 40 CFR 63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in 40 CFR 63.3890, determined according to 40 CFR 63.3951(a) through (g).

The permittee shall maintain records as specified in 40 CFR 40 CFR 63.3930 and 63.3931.

(Authority for term: 40 CFR 63.3952(a) through (d) and 3745-77-07(C)(1))

e) Reporting Requirements

(1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

(Authority for term: OAC rules 3745-21-09(B) and 3745-77-07(A)(1))

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

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

(3) The permittee shall submit semiannual reports which shall be postmarked or delivered no later than July 31 and January 31 following the end of each semiannual reporting period. The reporting period is the 6-month period ending on June 30 and December 31 of each year. The semiannual compliance reports shall cover the previous 6 months of operation, and each monthly compliance calculation shall be based on the records from the previous (rolling) 12 months of operation. The semiannual report shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and beginning and ending dates of the reporting period;

d. identification of the specific compliance method used;

e. statement of whether the affected source achieved the emission limitations for the compliance period;

f. if there were no deviations from the emission limitations in 63.3890(b)(1) a statement that there were no deviations from the emissions limitations during the reporting period;

g. if there was a deviation from the applicable emission limit in 40 CFR 63.3890, the semiannual compliance report must contain the information in e)(3)(h) through e)(3)(i) below;

h. the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in 40 CFR 63.3890; and

i. the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of 40 CFR 63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3920(a)(6))

f) Testing Requirements

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

a. Emission Limitation:

The volatile organic compound (VOC) content of the coatings employed shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents as a daily volume weighted average.

Applicable Compliance Method:

Compliance with shall be demonstrated by the information collected and recorded in d)(1).

(Authority for term: OAC rules 3745-21-09(B)(3)(i)and 3745-77-07(A)(1))

b. Emission Limitation:

The organic HAP emissions from the existing general use coatings operations shall not exceed 2.6 lbs/gal of coating solids used during each rolling, 12-month period.

Applicable Compliance Method:

Compliance may be demonstrated by the information collected and recorded in d)(7) above.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3941)

g) Miscellaneous Requirements

(1) None.

9. K003, Foundry Coating Line 1 with waterwash

Operations, Property and/or Equipment Description:

Metal Castings Coating Line 1 with waterwash

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 operation(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 are identified below. 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 3745-21-09(U)(1)(c)	The volatile organic compound (VOC) content of the coatings employed shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
b.	OAC Rule 3745-17-11(C)	See c)(1)&(2) below.
c.	40 CFR Part 63, Subpart MMMM (40 CFR 63.3880-63.3981) [In accordance with 40 CFR 63.3890(b)(1) this existing affected source and is complying with the MACT through the provisions allowed for under the "Emission rate without add-on controls option"]	The organic HAP emissions from the existing general use coatings operation shall not exceed 2.6 lbs/gal of coating solids used during each rolling, 12-month period. See b)(2)a.
d.	40 CFR 63.1-15 (40 CFR 63.3901)	As specified in 40 CFR 63.3901, Table 2 to 40 CFR Part 63, Subpart MMMM - Applicability of 40 CFR Part 63 General Provisions to Subpart MMMM, shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. The permittee has chosen to demonstrate compliance with the organic HAP emission limitation using the "Emission rate without add-on controls option" as provided for in 40 CFR 63.3891(b). As such the permittee shall demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials

used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in 40 CFR 63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis.

c) Operational Restrictions

(1) The permittee shall operate the waterwash for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the waterwash in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(Authority for term: OAC rules 3745-17-11(C)(1) & (2)(b) and 3745-77-07(A)(1))

(2) In the event the waterwashis not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

(Authority for term: OAC rules 3745-17-11(C)(1) & (2)(b) and 3745-77-07(A)(1))

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 of each coating, as applied; and

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

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a Permit to Install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)

(Authority for term: OAC rules 3745-21-09(B) and 3745-77-07(C)(1))

(2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the waterwash, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(a) and 3745-77-07(C)(1))

(3) The permittee shall conduct periodic inspections of the waterwash to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon

the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(c) and 3745-77-07(C)(1))

(4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the waterwash while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

(Authority for term: OAC rules 3745-17-11(C)(2)(c) and 3745-77-07(C)(1))

(5) The permittee shall document each inspection (periodic and annual) of the waterwash system and shall maintain the following information:

a. the date of the inspection;

b. a description of each/any problem identified and the date it was corrected;

c. a description of any maintenance and repairs performed; and

d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(d) &(f) and 3745-77-07(C)(1))

(6) The permittee shall maintain records that document any time periods when the waterwash was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the waterwash was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

(Authority for term: OAC rules 3745-17-11(C)(2)(e),(f), and (g) and 3745-77-07(C)(1))

(7) To demonstrate ongoing compliance with the organic HAP emission limitation in b)(1)c., the permittee shall perform the calculations in 40 CFR 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. The permittee shall collect and record these calculations on a monthly basis.

If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in b)(1)c, this is a deviation from the emission limitation for the compliance period and must be reported as specified in 40 CFR 40 CFR 63.3910(c)(6) and 63.3920(a)(6).

As part of each semiannual compliance report required by 40 CFR 63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in 40 CFR 63.3890, determined according to 40 CFR 63.3951(a) through (g).

The permitteeshall maintain records as specified in 40 CFR 40 CFR 63.3930 and 63.3931.

(Authority for term: 40 CFR 63.3952(a) through (d) and 3745-77-07(C)(1)).

e) Reporting Requirements

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

(Authority for term: OAC rules 3745-21-09(B) and 3745-77-07(A)(1))

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the waterwash system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

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

(3) The permittee shall submit semiannual reports which shall be postmarked or delivered no later than July 31 and January 31 following the end of each semiannual reporting period. The reporting period is the 6-month period ending on June 30 and December 31 of each year. The semiannual compliance reports shall cover the previous 6 months of operation, and each monthly compliance calculation shall be based on the records from the previous (rolling) 12 months of operation. The semiannual report shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and beginning and ending dates of the reporting period;

d. identification of the specific compliance method used;

e. statement of whether the affected source achieved the emission limitations for the compliance period;

f. if there were no deviations from the emission limitations in 63.3890(b)(1) a statement that there were no deviations from the emissions limitations during the reporting period;

g. if there was a deviation from the applicable emission limit in 40 CFR 63.3890, the semiannual compliance report must contain the information in e)(3)(h) through e)(3)(i) below;

h. the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in 40 CFR 63.3890; and

i. the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of 40 CFR 63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3920(a)(6))

f) Testing Requirements

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

a. Emission Limitation:

The volatile organic compound (VOC) content of the coatings employed shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

If required, USEPA Methods 24 shall be used to determine the VOC contents for coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or ink, the permitee shall so notify the Ohio EPA of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

(Authority for term: OAC rules 3745-21-09(U)(2)(c), OAC rule 3745-21-04 and 3745-77-07(A)(1))

b. Emission Limitation:

The organic HAP emissions from the existing general use coatings operations shall not exceed 2.6 lbs/gal of coating solids used during each rolling, 12-month period.

Applicable Compliance Method:

Compliance may be demonstrated by the information collected and recorded in d)(7) above.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3941)

g) Miscellaneous Requirements

(1) None.

10. N001Thermal Sand Reclamation Unit

Operations, Property and/or Equipment Description:

Thermal sand reclamation unit with baghouse (Thermafire 6000)

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) See g)(1).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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 (PTI P0107263)	Carbon Monoxide (CO) emissions shall not exceed 6.6 lbs/hour and 28.7 tons per year. Volatile Organic Compounds (VOC) emissions shall not exceed 13.68 lbs/day and 2.5 tons per year. Nitrogen Oxides (NOx) emissions shall not exceed 21.6 lbs/day and 3.94 tons per year. Sulfur Dioxide (SO2) emission shall not exceed 0.0024lb/ hourand 0.01 ton per year. Particulate matter (PM) and particulate matter 10 microns and less in diameter (PM10) shall not exceed 1.63lbs/hour and 7.14 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-09(B), and OAC rule 3745-17-09(C). See b)(2)c.
b.	OAC rule 3745-31-05(C), as effective 12/1/06	See b)(2)d.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/1/06	See b)(2)e.
d.	OAC rule 3745-17-07(A)(1)	Visible particulate (VE) emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
e.	OAC rule 3745-17-09(B)	Particulate emissions (PE) from this emissions unit shall not exceed 0.10 pound per 100 pounds of liquid, semi-solid, or solid refuse and salvageable material charged.
f.	OAC rule 3745-17-09(C)	Incinerators, including all associated equipment and grounds, shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.

(2) Additional Terms and Conditions

a. The hourly, or daily, and annual emission limitations of CO, VOC, NOx, SO_2, PM and PM10 for this emissions unit are based on the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limitations.

b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the visible and mass emission limitations and the use of only natural gas as fuel.

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, the 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 the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement 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 the mass NOx, SO2, VOC, PE and PM10, emission limitations 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 P0107263 for this air contaminant source takes into account the following voluntary restrictions as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) under OAC rule 3745-31-05(A)(3):

i. for particulate matter (PM and particulate matter emissions ten microns and less in diameter (PM10)) emissions: the permittee shall install, operate, and maintain a fabric filter on this emissions unit.

ii. 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:

e. The best available technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled nitrogen oxides (NOx), sulfur dioxide (SO2) and volatile organic compounds (VOC) emissions from this air contaminant source since the potential to emit for NOx, SO2, and VOC is less than 10.0 TPY.

c) Operational Restrictions

(1) The particulate emissions from this emissions unit shall be vented to a baghouseat all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse (baghouse BH08) is between 1.5 to 8.5 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install P0107263: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall notify Hamilton County Department of Environmental Services in writing of any fuel burned in this emissions unit other than natural gas.

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

(2) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in (2)a.(above) where a prompt investigation was not conducted;

d. each incident of deviation described in (2)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in (2)a. where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(3) The notifications identified in terms e)(1) and e)(2) shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

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

(4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install P0107263: d)(1)-d)(3). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

PM/PM10 from this emissions unit shall not exceed 1.63lbs/hour and 7.14 tons per year.

Applicable Compliance Method:

Compliance with the above PM/PM10 hourly emission limitation shall be determined by multiplying the PM10 emission factor as supplied by the manufacturer's specifications as provided in PTI application 14-05904 submitted

on December 7, 2006 (0.01 grains per dry standard cubic foot (gr/dscf)) by the rated air flow rate of the Pulse II Baghouse (19,000 cubic feet per minute(cu. ft/min)), multiplying the result by 60 minutes per hour, and dividing by the standard conversion of 7,000 grains per pound.

Compliance with the above PM/PM10 annual emission limitation shall be determined by multiplying the above referenced hourly emission rate by the number of hours of operation in the year (8,760), and dividing the result by the number of pounds in a ton (2,000).

If required, emission testing shall be performed to determine compliance with the PM emission limitation. The testing shall be conducted using the following method: Methods 1- 5 of 40 CFR, Part 60, Appendix A.

*assume that all PM10 are PM and that PM2.5 is a subset of PM10. As long as emissions unit is in compliance with the PM10 limitation, then both the PM and PM2.5 emission limitations are in compliance with the terms and conditions of this permit.

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

b. Emission Limitation:

Particulate emissions (PE) from this emissions unit shall not exceed 0.10 pound per 100 pounds of liquid, semi-solid, or solid refuse and salvageable material charged.

Applicable Compliance Method:

Compliance with the above emission limitation was established by employing information from air PTI application 14-05904 submitted on December 7, 2006.

If required, emission testing shall be performed to determine compliance with the particulate emission limitation and appropriate information obtained during the emission test. The testing shall be conducted using the following method: Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

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

c. Emission Limitations:

Carbon Monoxide (CO) emissions shall not exceed 6.6 lbs/hour and 28.7 TPY

Applicable Compliance Method:

The actual annual emission rate shall be calculated by multiplying the actual annual fuel usages by the emission factors from U.S. EPA, AP-42, Fifth Edition, Section 1.4, Table 1.4-1(revised 7/98) emission factor for natural gas combustion.

The hourly and annual emissions limitation is based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data as provided in PTI application14-05904 submitted on December 7, 2006.

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

d. Emissions Limitation:

Volatile Organic Compounds (VOC) emissions shall not exceed 13.68 lbs/day and 2.5 tons per year.

Applicable Compliance Method:

Daily emission limitation shall be determined by multiplying the VOC emission factor as supplied by the manufacturer's specifications as provided in PTI application 14-05904 submitted on December 7, 2006 (0.57 lb/hour) by the maximum hours of operation in a day (24).

Compliance with the annual emission limitation shall be determined by multiplying the above referenced daily emission rate by the number of days operated in the year (365), and dividing the result by the number of pounds in a ton (2,000).

The daily and annual emission limitation is based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data as provided in PTI application14-05904 submitted on December 7, 2006.

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

e. Emission Limitations:

Nitrogen Oxide (NOx) emissions shall not exceed 21.6 lbs/day and 3.94 tons per year.

Applicable Compliance Method:

Daily emission limitation shall be determined by multiplying the NOx emission factor as supplied by the manufacturer's specifications as provided in PTI application 14-05904 submitted on December 7, 2006 (0.9 lb/hour) by the maximum hours of operation in a day (24).

Compliance with the annual emission limitation shall be determined by multiplying the above referenced daily emission rate by the number of days operated in the year (365), and dividing the result by the number of pounds in a ton (2,000).

The daily and annual emission limitation is based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data as provided in PTI application14-05904 submitted on December 7, 2006.

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

f. Emissions Limitations:

SO2 emissions shall not exceed 0.002 lb/hour and 0.01 ton per year.

Applicable Compliance Method:

The annual and hourly emission rate shall be calculated by multiplying the annual or hourly maximum natural gas throughput as provided in PTI application 14-05904 submitted on December 7, 2006 by the emission factor (0.6 lb/10^6 scf) from AP-42, Fifth Edition, Section 1.4, Table 1.4-2(revised 7/98) emission factor for natural gas combustion.

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

g. Emission Limitation:

Visible particulate emissions (VE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install P0107263: f)(1).The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic pollutant will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.

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

11. P014, Medium Mold Line Abrasive Clean

Operations, Property and/or Equipment Description:

Medium Mold Line Abrasive Clean with cartridge filer.

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 operation(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 are identified below. 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)	Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	4.76 lbs/hrof particulate emissions (PE).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the cartridge filter at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the cartridge filter (cartridge unit CF-03) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the cartridge filter when the controlled emissions unit(s) is/are in operation, including periods of startup and

shutdown. The permittee shall record the pressure drop across the cartridge filter on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the cartridge filter is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring

requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the cartridge filter was outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the cartridge filter;

c. each incident of deviation described in a. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in a.where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in a.where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the limitation for visible emissions shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

b. Emission Limitation:

4.76 lbsof PE/hr.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 1.4 tons of castings cleaned/hour (max. hourly rate) x 17 lbsof PE/ton of castings cleaned (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

12. P015, Large Mold Line Abrasive Clean

Operations, Property and/or Equipment Description:

Large Mold Abrasive Clean with cartridge filter

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 operation(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 are identified below. 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)	Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	8.0lbs/hrof particulate emissions (PE).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the cartridge filter at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the cartridge filter (cartridge unit CF-03) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the cartridge filter when the controlled emissions unit(s) is/are in operation, including periods of startup and

shutdown. The permittee shall record the pressure drop across the cartridge filter on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the cartridge filter is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring

requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the cartridge filter was outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the cartridge filter;

c. each incident of deviation described in a. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in a. where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

b. Emission Limitation:

8.0lbsof PE/hr.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 3.44 tons of castings cleaned/hour (max. hourly rate) x 17 lbsof PE/ton of castings cleaned (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

13. P016, Small Mold Line Abrasive Clean

Operations, Property and/or Equipment Description:

Small Mold Line Abrasive Clean with 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.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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)	Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	3.72lbs/hrof particulate emissions (PE).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) 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 and 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse (baghouse BH04) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in

accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in a. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in a. where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

b. Emission Limitation:

3.72lbsof PE/hr.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 1.1 tons of castings cleaned/hour (max. hourly rate) x 17 lbsof PE/ton of castings cleaned (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

14. P026, Pneumatic Sand Handling System

Operations, Property and/or Equipment Description:

Pneumatic Sand Handling System with cartridge filters and baghouses.

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 operation(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 are identified below. 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)	Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	36.9lbs/hrof particulate emissions (PE) from the stacks associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an existing fugitive dust source at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting a portion of the particulate emissions to the control devices referenced in d)(1) and fiber bed filters BH-05, CF-04, and CF-05.

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the baghouses noted in d)(1)a. at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghousesare noted below:

a. BH-06 1.5 - 8.5 inches of water; and

b. BH-07 1.5 - 8.5 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouses when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouses on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouses is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghouses were outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the cartridge filters and baghouses;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

36.9lbsof PE/hr from the stacks associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 87 tonsof sand handled/hr(max. hourly rate) x 7.2 lbs/ton of sand handled (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

15. P029, Small/Medium Line Grinding Booths

Operations, Property and/or Equipment Description:

Small/Medium Line Grinding Booths

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 operation(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 are identified below. 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)	Visible particulate emissions from the stack(s) associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	12.87lbs/hrof particulate emissions (PE) from the stack(s) associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an existing fugitive dust source at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting of a portion of the particulate emissions to a baghouse.

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the baghouse (BH-04) noted in d)(1) at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse (baghouse BH04) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible

emissionsincident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghouse were outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

12.87lbs/hrof PE from the stacks associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 7.19 tons of castings cleaned/hour (max. hourly rate) x 17 lbsof PE/ton of castings cleaned (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

16. P030, Small Mold Line Casting Shakeout

Operations, Property and/or Equipment Description:

Small Mold Casting Shakeout with cartridge filter

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 operation(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 are identified below. 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)	Visible particulate emissions from the stack(s) associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	6.0lbs/hrof particulate emissions (PE) from the stack(s) associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an automated shakeout line at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting of a portion of the particulate emissions to a cartridge filter.

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the cartridge filter (CF-02) noted in d)(1) at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the cartridge filter (cartridge filter CF-02) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the cartridge filter when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the cartridge filter on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the cartridge filter is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the cartridge filter were outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the cartridge filter;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

6.0lbs/hrof PE from the stack(s) associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 11.7 tons of metal shakeout/hour (max. hourly rate) x 3.2 lbsof PE/ton of metal shakeout (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

17. P031, Medium Mold Line Casting Shakeout

Operations, Property and/or Equipment Description:

Medium Mold Casting Shakeout Line with 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 operation(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 are identified below. 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)	Visible particulate emissions from the stack(s) associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	2.94lbs/hrof particulate emissions (PE) from the stack(s) associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an automated shakeout line at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting of a portion of the particulate emissions to a baghouse.

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the baghouse (BH-01) noted in d)(1) at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse(baghouse BH-01) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghousewhen the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouseon a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouseis effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible

emissionsincident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghousewere outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

2.94lbs/hrof PE from the stack(s) associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 4.6 tons of metal shakeout/hour (max. hourly rate) x 3.2 lbsof PE/ton of metal shakeout (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

18. P032, Large Mold Line Casting Shakeout

Operations, Property and/or Equipment Description:

Large Mold Casting Shakeout Line withbaghouse

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 operation(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 are identified below. 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)	Visible particulate emissions from the stack(s) associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	9.53lbs/hrof particulate emissions (PE) from the stack(s) associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an automated shakeout line at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting of a portion of the particulate emissions to a baghouse(s).

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the baghouses (BH-02A and BH-02B) noted in d)(1) at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouses (BH-02A and BH-02B) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghousewhen the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouseon a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouseis effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible

emissionsincident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghousewere outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

9.53 lbs/hrof PE from the stack(s) associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = 24 tons of metal shakeout/hour (max. hourly rate) x 3.2 lbsof PE/ton of metal shakeout (emission factor from AP-42 Table 12.10-7) x (1-.98) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

19. P034, Swing Grinding

Operations, Property and/or Equipment Description:

Swing Grinding

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 operation(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 are identified below. 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)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a fugitive dust source at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
d.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure and compliance with the fugitive visible emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

g) Miscellaneous Requirements

(1) None.

20. P036, Small Mold Line Mold-making and Sand Preparation

Operations, Property and/or Equipment Description:

Preparation of sand for use in small molds

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 operation(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 are identified below. 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)	Visible particulate emissions from the stack(s) associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	1.72lbs/hrof particulate emissions (PE) from the stack(s) associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is afugitive dust source at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting of a portion of the particulate emissions to a cartridge filter.

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the cartridge filter (CF-02) noted in d)(1) at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the cartridge filter (cartridge filter CF-02) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the cartridge filter when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the cartridge filter on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the cartridge filter is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the cartridge filter were outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the cartridge filter;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

1.72lbs/hrof PE from the stack(s) associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = mold production/hour (max. hourly rate) x 0.41lb of PE/ton of mold production (emission factor from Ohio RACM Table 2.7-1, Sand Preparation) x (1-.95) (overall control efficiency).

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

21. P038, Sand Reclamation

Operations, Property and/or Equipment Description:

Sand Reclamation

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 operation(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 are identified below. 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)	Visible particulate emissions from the stack(s) associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(A) (Based on Figure II)	11.8lbs/hrof particulate emissions (PE) from the stack(s) associated with this emissions unit.
c.	OAC rule 3745-17-07(B)	Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is a fugitive dust source at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
f.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the venting of a portion of the particulate emissions to a cartridge filer and baghouse(s).

c) Operational Restrictions

(1) Particulate emissions, from the collection points identified in Cast-Fab's Title V Permit to Operate Application submitted 11/15/2010, shall be vented to the cartridge filter (CF-01) and baghouse (BH-03) noted in d)(1) at all times the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the cartridge filter and baghouse (BH-03 and CF-01) is between 1.5 to 6 inches of water.

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the cartridge filter and baghousewhen the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the cartridge filter andbaghouseon a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit,the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the cartridge filter and baghouseis effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule and 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for the following:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghouseand cartridge filter were outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse and cartridge filter;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s),as identified in the monitoring and record keeping requirements of this permit.

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

(2) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitation:

Visible particulate emissions from the stacks associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B))

c. Emission Limitation:

11.8lbsof PE per hour from the stack(s) associated with this emissions unit.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

lbs/hrof PE = tons of sand handled/hour (max. hourly rate) x 3.6lb/ton of sand handled (emission factor from AP-42 Table 12.10-7) x (1-.95) (overall control efficiency.

If testing is required to determine compliance with the allowable PE emission limitation, then testing shall be conducted using Methods 1-5 of 40 CFR Part 60, Appendix A.

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

g) Miscellaneous Requirements

(1) None.

22. P039, 9.6MMBtu/hr natural gas fired Scrap Preheater

Operations, Property and/or Equipment Description:

Direct fired scrap preheater fueled by natural gas

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 operation(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 are identified below. 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 14-04012)	See b)(2)c.* and c)(1). *The emission limitations noted in b)(2)c. are based on the emissions unit's potential to emit. Therefore, there are no recordkeeping requirements needed to demonstrate compliance with these limitations.
b.	OAC rule 3745-17-11(B)	See b)(2)a.
c.	OAC rule 3745-17-07(A)	See b)(2)b.
d.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an existing scrap preheater at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
e.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-

11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c. The following emission limitations shall not be exceeded:

Pollutant	Lb/MMBtu	Lb(s)/hr	Tons Per Year
OC	0.006	0.11	0.49
NOx	0.14	2.69	11.77
CO	0.035	0.67	2.94
PM/PM10	0.014	0.26	1.15
SO2	0.0006	0.01	0.05

c) Operational Restrictions

(1) The permittee shall use only “clean scrap” for the raw material charge that enters the preheater. Reasonably available control measures (RACM) define clean scarp as “clean materials” that are essentially devoid of dirt, oil, or grease and carry no extraneous burden”

d) Monitoring and/or Recordkeeping Requirements

(1) See d)(2) for emissions unit F022, Charge/Scrap Handling to document only “clean scrap” is used.

e) Reporting Requirements

(1) See e)(2) for emissions unit F022, Charge/Scrap Handling to document only “clean scrap” is used.

f) Testing Requirements

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

a. Emission Limitations:

Pollutant	lb/MMBtu	lb(s)/hr	Tons Per Year
OC	0.006	0.11	0.49
NOx	0.14	2.69	11.77
CO	0.035	0.67	2.94
PM/PM10	0.014	0.26	1.15
SO2	0.0006	0.01	0.05

Applicable Compliance Method:

The lb/MMBtu emission limitations noted above are based on emission factors submitted with PTI 14-04012 and reflect the potential to emit for the emissions unit.

The lbs/hr emission limitations were established by multiplying the lb/MMBtu emission factors by the rated capacity of the burners of 9.6MMBtu/hr.

The TPY emission limitations are based on the maximum hourly emission rate and 8760 hours per year of operation.

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3)).

g) Miscellaneous Requirements

(1) None.

23. Hot Metal Transfer, F013

Operations, Property and/or Equipment Description:

Hot Metal Transfer from the Inoculation Ladle

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 operation(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 are identified below. 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)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an existing fugitive dust source an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
d.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure and compliance with the fugitive visible emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

g) Miscellaneous Requirements

(1) None.

24. P037 Large Core Sand and Binder Mixers

Operations, Property and/or Equipment Description:

Three Large Core Sand and Binder Mixer (East, West, Palmer) and associated drying ovens (natural gas fired less than 4 MMBtu/hr)

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 operation(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 are identified below. 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)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), this emissions unit is an existing fugitive dust source an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
d.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure and compliance with the fugitive visible emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

g) Miscellaneous Requirements

(1) None.

25. P040Medium Mold Line Release Agent

Operations, Property and/or Equipment Description:

Medium mold release application

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 operation(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 are identified below. 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 3745-21-07(G)	See b)(2)a. and b)(2)b.

(2) Additional Terms and Conditions

a. This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01. It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G).

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this dateis no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(2)a. and e)(1).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) Prior to employing any photochemically reactive material in this emissions unit, including any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to the appropriate Ohio EPA field office. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material and the maximum amount to be used, in pounds per hour, and pounds per day.

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-21-07(G)(2))

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

26. P041, Large Mold Line Release Agent

Operations, Property and/or Equipment Description:

Large mold release application

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 operation(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 are identified below. 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 3745-21-07(G)	See b)(2)a. and b)(2)b.

(2) Additional Terms and Conditions

a. This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01. It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G).

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this dateis no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(2)a. and e)(1).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) Prior to employing any photochemically reactive material in this emissions unit, including any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to the appropriate Ohio EPA field office. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material and the maximum amount to be used, in pounds per hour, and pounds per day.

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-21-07(G)(2))

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

h) Miscellaneous Requirements

(1) None.

27. P042, Small Core and Mold Release Agent

Operations, Property and/or Equipment Description:

Small core and mold release agent application

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 operation(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 are identified below. 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 3745-21-07(G)	See b)(2)a. and b)(2)b.

(2) Additional Terms and Conditions

a. This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01. It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G).

b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this dateis no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(2)a. and e)(1).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) Prior to employing any photochemically reactive material in this emissions unit, including any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to the appropriate Ohio EPA field office. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material and the maximum amount to be used, in pounds per hour, and pounds per day.

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-21-07(G)(2))

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

h) Miscellaneous Requirements

(1) None.

28. Emissions Unit Group -Electric Induction Furnaces: F015 andF016

EU ID	Operations, Property and/or Equipment Description
F015	10-ton electric induction furnace (East)
F016	10-ton electric induction furnace (Center)

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 operation(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 are identified below. 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 14-01821) Netting Determination to avoid the requirements of the Prevention of Significant Deterioration (PSD) program.	The total combined particulate emissions from F015, F016, and F018 shall not exceed the following: 270 lbs/day; 2.73 tons per month; and 32.85 tons per year based on a rolling, 12-month summation. See c)(1).
b.	OAC rule 3745-17-07(B)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), these emissions unitsareexisting electric induction furnaces at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7. for the reporting requirements.
e.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure and compliance with the fugitive visible emission limitations.

c) Operational Restrictions

(1) The total combined gray iron production for emissions units F015, F016, and F018 shall not exceed the following:

360 tons per day;

7,300 tons per month; and

87,600 tons per year.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the

observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) The permittee shall collect and record the following information:

a. the daily total combined gray iron production, recorded in tons, for emissions units F015, F016, and F018;

b. the monthly total combined gray iron production, recorded in tons, for emissions units F015, F016, and F018 (the summation of line a. for all days during the month during which any of the emissions units operated); and

c. the rolling twelve-month total combined gray iron production, recorded in tons, for emissions units F015, F016, and F018 (the summation of line b. for the current month and previous 11-months).

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-01821: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) The permittee shall submit deviation (excursion) reports for any daily, monthly, and/or annual record which shows an exceedance of any of the production limitations specified in c)(1).

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-01821: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitations:

270 lbsof PE/day;

2.73 tons per month; and

32.85 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with production limitations in c)(1)ensures compliance with the emission limitations based on an emission factor of 1.5 lbsof PE/ton of iron from RACM Table 2.7-1 and a 50% control efficiency for the use of clean scrap, building enclosure and a cover.).

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-01821: f)(1)The testing requirements contained in the above-referenced Permit to

Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

29. Electric Induction Furnace: F018

EU ID	Operations, Property and/or Equipment Description
F018	15-ton electric induction furnace (West)

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 operation(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 are identified below. 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 14-01821)	Particulate emissions shall not exceed 15 lbs/hr and 10.95 tons per year. Particulate emissions shall not exceed 0.75 lb per ton of product. Lead emissions shall not exceed 0.055 lb per ton of product. Visible particulate emissionsshall not exceed 15 percent opacity, as a six-minute average. See c)(2)-c)(3). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D) Netting Determination to avoid the requirements of the Prevention of Significant Deterioration (PSD) program.	The total combined particulate emissions from F015, F016, and F018 shall not exceed the following: 270 lbs/day; 2.73 tons per month; and 32.85 tons per year based on a rolling, 12-month summation. See c)(1).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(B)	The visible particulate emissions limitations specified in 3745-17-07(B) are less stringent than those established under 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	See b)(2)a.
f.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), theseemissions unitsareexisting electric induction furnaces at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
g.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure, compliance with the fugitive visible emission limitations, the use of a cover, and clean scrap.

c) Operational Restrictions

(1) The total combined gray iron production for emissions units F015, F016, and F018 shall not exceed the following:

360 tons per day;

7,300 tons per month; and

87,600 tons per year.

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

(2) Other than periods of charging and tappingthe cover shall remain on the induction furnace.

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

(3) Clean scrap shall constitute the majority of the metal charged.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

(2) The permittee shall collect and record the following information:

a. the daily total combined gray iron production, recorded in tons, for emissions units F015, F016, and F018;

b. the monthly total combined gray iron production, recorded in tons, for emissions units F015, F016, and F018 (the summation of line a for all days during the month during which any of the emissions units operated); and

c. the rolling twelve-month total combined gray iron production, recorded in tons, for emissions units F015, F016, and F018 (the summation of line b for the current month and previous 11-months).

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit To Install 14-01821: d)(1)-d)(2). The

monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

(2) The permittee shall submit deviation (excursion) reports for any daily, monthly, and/or annual record which shows an exceedance of any of the production limitations specified in c)(1).

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

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit To Install14-01821: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 15 percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emission observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

b. Emission Limitations:

270 lbsof PE/day;

2.73 tons of PE per month; and

32.85 tons of PE per year based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with production limitations in c)(1) ensures compliance with the emission limitations based on an emission factor of 1.5 lbsof PE/ton of iron from RACM Table 2.7-1 and a 50% control efficiency for the use of clean scrap, building enclosure and a cover.

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

c. Emission Limitation:

Particulate emissions shall not exceed 15 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be determined by multiplying the RACM emission factor of 1.5 lbsof PE/ton of iron (Table 2.7-1) by a control efficiency of 50% for the use of clean scrap, building enclosure, and use of a cover, and by the maximum throughput of 15 tons per hour.

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

d. Emission Limitation:

Lead emissions shall not exceed 0.055 lb per ton of product.

Applicable Compliance Method:

Compliance with the 0.055 lbof lead/ton of product limitation is based on the AP-42 emission factor as defined in Table 12.10-5 (1/95).

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

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-01821: f)(1)The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

30. Emissions Unit Group -Mold Pouring and Cooling Lines: F019, F020, F021,

EU ID	Operations, Property and/or Equipment Description
F019	Large pouring and cooling line
F020	Medium pouring and cooling line
F021	Small pouring and cooling line

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 operation(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 are identified below. 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)	Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	40 CFR Part 63, Subpart EEEEE (40 CFR 63.7680-7765) [In accordance with 63.7682(b), theseemissions unitsareexisting pouring and cooling lines at an existing iron foundry]	See Facility-Wide Section B.5. for the facility wide visible emission limitation established in 40 CFR 63.7690(a)(7). See Section B.6.for the associated monitoring and testing requirements and Section B.7.for the reporting requirements.
d.	40 CFR 63.1-15, Subpart A (40 CFR 63.7760)	Table 1 to 40 CFR Part 63, Subpart EEEEE – Applicability of General Provisions (Subpart A) to Subpart EEEEE shows which parts of the General Provisions in 40 CFR Part 63.1 – 15 apply.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures (RACM) to minimize or eliminate visible emissions of fugitive dust. Currently, the RACM requirement is satisfied by the use of the building as an enclosure and compliance with the fugitive visible emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. 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 emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

b. any corrective actions taken eliminate the visible emissions.

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

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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from this fugitive emissions dust source shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Authority for term: (OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(3))

g) Miscellaneous Requirements

(1) None.

31. Emissions Unit Group -Spray Booths: K006, K010, K011, K017

EU ID	Operations, Property and/or Equipment Description
K006	Miscellaneous Metal Coating (less than 3 gallon per day)
K010	Miscellaneous Metal Coating (less than 3 gallon per day)
K011	Miscellaneous Metal Coating (less than 3 gallon per day)
K017	Miscellaneous Metal Coating (less than 3 gallon per day)

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 operation(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 are identified below. 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 3745-21-09(U)(2)(e)(ii)	The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day.
b.	OAC Rule 3745-17-11(C)	Exempt per OAC rule 3745-17-11(A)(1)(h)(i).
c.	40 CFR Part 63, Subpart MMMM (40 CFR 63.3880-63.3981) [In accordance with 40 CFR 63.3890(b)(1) this existing affected source and is complying with the MACT through under the provisions allowed for under the "Emission rate without add-on controls option"]	The organic HAP emissions from the existing general use coatings operation shall not exceed 2.6 lbs/gal of coating solids used during each rolling, 12-month period. See b)(2)a.
d.	40 CFR 63.1-15 (40 CFR 63.3901)	As specified in 40 CFR 63.3901, Table 2 to 40 CFR Part 63, Subpart MMMM - Applicability of 40 CFR Part 63 General Provisions to Subpart MMMM, shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. The permittee has chosen to demonstrate compliance with the organic HAP emission limitation using the "Emission rate without add-on controls option" as

provided for in 40 CFR 63.3891(b). As such the permittee shall demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in 40 CFR 63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for the coating line when in operation:

a. the name and identification number of each coating employed;

b. the volume, in gallons, of each coating employed; and

c. the total volume, in gallons, of all of the coatings employed.

(Authority for term: OAC rules 3745-21-09(B)(3)(d) and 3745-77-07(C)(1))

(2) To demonstrate ongoing compliance with the organic HAP emission limitation in b)(1)c, the permittee shall perform the calculations in 40 CFR 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. The permittee shall collect and record these calculations on a monthly basis.

If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in b)(1)c, this is a deviation from the emission limitation for the compliance period and must be reported as specified in 40 CFR 40 CFR 63.3910(c)(6) and 63.3920(a)(6).

As part of each semiannual compliance report required by 40 CFR 63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in 40 CFR 63.3890, determined according to 40 CFR 63.3951(a) through (g).

The permittee shall maintain records as specified in 40 CFR 40 CFR 63.3930 and 63.3931.

(Authority for term: 40 CFR 63.3952(a) through (d) and 3745-77-07(C)(1))

e) Reporting Requirements

(1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employs more

than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

(Authority for term: OAC rules 3745-21-09(B)(3)(e) and 3745-77-07(A)(1))

(2) The permittee shall submit semiannual reports which shall be postmarked or delivered no later than July 31 and January 31 following the end of each semiannual reporting period. The reporting period is the 6-month period ending on June 30 and December 31 of each year. The semiannual compliance reports shall cover the previous 6 months of operation, and each monthly compliance calculation shall be based on the records from the previous (rolling) 12 months of operation. The semiannual report shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and beginning and ending dates of the reporting period;

d. identification of the specific compliance method used;

e. statement of whether the affected source achieved the emission limitations for the compliance period;

f. if there were no deviations from the emission limitations in 63.3890(b)(1) a statement that there were no deviations from the emissions limitations during the reporting period;

g. if there was a deviation from the applicable emission limit in 40 CFR 63.3890, the semiannual compliance report must contain the information in e)(3)(h) through e)(3)(i) below;

h. the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in 40 CFR 63.3890; and

i. the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of 40 CFR 63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3920(a)(6))

f) Testing Requirements

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

a. Emission Limitation:

The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day.

Applicable Compliance Method:

Compliance may be demonstrated by the record keeping in d)(1).

(Authority for term: OAC rules 3745-21-09(U)(2)(e)(ii) and 3745-77-07(C)(1))

b. Emission Limitation:

The organic HAP emissions from the existing general use coatings operations shall not exceed 2.6 lbs/gal of coating solids used during each rolling, 12-month period.

Applicable Compliance Method:

Compliance may be demonstrated by the information collected and recorded in d)(2) above.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3941)

g) Miscellaneous Requirements

(1) None.