John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

5/14/2014

Certified Mail

Facility ID: 0285010001
Permit Number: P0115525
County: Wayne

Steve Steiner
The Quality Castings Company
1200 North Main Street
Orrville, OH 44667-0058

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

Dear Permit Holder:

Enclosed is a finalOhio Environmental Protection Agency (EPA) Air Pollution 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

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. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office as indicated on page one of your permit.

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*
Ohio EPA DAPC, Northeast District Office

FINAL

Division of Air Pollution Control
Title V Permit
for
The Quality Castings Company

Facility ID:	0285010001
Permit Number:	P0115525
Permit Type:	Renewal
Issued:	5/14/2014
Effective:	6/4/2014
Expiration:	6/4/2019

Division of Air Pollution Control
Title V Permit
for
The Quality Castings Company

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Authorization

Facility ID:	0285010001
Facility Description:	Gray Iron Foundry
Application Number(s):	A0047812
Permit Number:	P0115525
Permit Description:	Title V Permit renewal for a Gray Iron Foundry.
Permit Type:	Renewal
Issue Date:	5/14/2014
Effective Date:	6/4/2014
Expiration Date:	6/4/2019
Superseded Permit Number:	P0108006

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

The Quality Castings Company
1200 North Main Street
Orrville, OH 44667-0058

Ohio Environmental Protection Agency (EPA)District Office or local air agency responsible for processing and administering your permit:

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
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 For State-Only Requirements

(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

(5) Standard Term and Condition A. 30.

(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 recordingsfor 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 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 submittedscheduled maintenancerequests, 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 submitted promptly to the Ohio EPA DAPC, Northeast District Office. Except as provided below, the written reports shall be submitted 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 to the Ohio EPA DAPC, Northeast District Office 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northeast District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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) 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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

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

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

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. Reopening for Cause

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

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

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

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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible

Officialthat, 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office) 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 on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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 Federal Register 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 is subject to 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.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified 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 operating 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 theOhio EPA DAPC, Northeast District Office.

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 Ohio EPA DAPC, Northeast District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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 For State-Only Requirements

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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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 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 potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.

3. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from Ohio EPA.

4. In order to avoid the requirements of 40 CFR Part 63, Subpart EEEEE, the permittee has voluntarily accepted a production restriction of 84,000 tons of iron melted, based on a rolling, 12 month summation.

   Through this production restriction the permittee's potential to emit for hazardous air pollutants (HAPs)* will be lowered to 9.9** tpy for the highest single HAP and to 24.9** tpy for all HAPs combined.

5. To ensure that the production restriction and emission limitations are not exceeded, the permittee has agreed to accept the following record keeping requirement:

   The permittee shall maintain monthly records of the rolling, 12-month summations of the production rates [i.e., the rolling, 12-month summation of production rates shall be calculated by adding the production rates for the preceding 11 calendar months plus the production rate for the current calendar month].

   * a listing of HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of Ohio EPA.

   ** The potential to emit was used for emissions units not directly restricted by the production restriction.

6. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production restriction.

7. For units not directly restricted by the annual production restriction, the permittee shall maintain calculations of the potential to emit for each emissions unit.

   Prior to the installation of any new emissions units that emit any HAPs, the permittee shall submit a revised potential to emit analysis to demonstrate that the emissions unit will not cause the facility to become a major source of HAPs.

8. The permittee is advised that this facility is subject to the "Generally Available Control Technology" (GACT) requirements under 40 CFR Part 63, Subpart ZZZZZ, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources. The U.S. EPA is responsible for the administration of the requirements of this rule at this time. It should be noted that the enforcement authority of the GACT requirements is not delegated to Ohio EPA at the time of this permit processing. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website http://www.ecfr.gov/ or by contacting the Ohio EPA Northeast District Office

C. Emissions Unit Terms and Conditions

1. F013, Inliner Mold Line

Operations, Property and/or Equipment Description:

Green sand molding using the Osborn Inliner automatic molding machine

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
b.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
c.	OAC rule 3745-31-05(A)(3) (PTI 02-9754)	Particulate emissions (PE) shall not exceed 0.5 pound per hour.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document the average production rate, in tons of iron per hour.

[Authority for term: OAC rule 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 fugitive particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an

operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

e) Reporting Requirements

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 0.5 pound per hour.

<u>Applicable Compliance Method</u>:

Compliance may be determined by multiplying the maximum production rate (tons iron/hr) by the emission factor of 0.04 lb PE/ton iron.

The emission factor (0.04 lb PE/ton iron) is specified in Table 2.7-1 of Ohio EPA's document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September 1980.

If required, emission testing shall be performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: PTI 02-9754, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

2. F017, 722 Mold Line

Operations, Property and/or Equipment Description:

Green sand molding using the Osborn 722 cope and drag style of molding

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
b.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
c.	OAC rule 3745-31-05(A)(3) (PTI 02-0374)	Particulate emissions (PE) shall not exceed 0.40 lb/hr. Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average. Emissions of volatile organic compounds (VOC) shall not exceed 13.5 lbs/hr, as an average over each day and 22.5 tpy, as a rolling, 12-month summation.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The amount of metal poured in the Osborn 722 mold making line shall not exceed 30,000 tons during each rolling, 12-month period.

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following record keeping requirements are as stringent as or more stringent than the recordkeeping requirements contained in permit-to-install 02-10374, issued on December 18,1996: d)(2), d)(3) and d)(4). The reporting requirements contained in the above - referenced permit-to-install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the permit-to-install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)]

(2) The permittee shall maintain the following records each month for this emissions unit:

a. the company identification of the mold release used;

b. the total amount of mold release used, in gallons;

c. the VOC content of the mold release, in pounds of VOC/pound of mold release;

d. the number of hours of operation;

e. an estimate of the total VOC emission rate, in pounds, calculated as (b) x (the density of the mold release) x (c); and

f. an estimate of the average hourly VOC emission rate, calculated as (e/d).

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain monthly records that list the following information for this emissions unit:

a. tons of iron poured;

b. the rolling, 12-month summation of the tons of iron poured;

c. the number of hours of operation for this emissions unit;

d. the average hourly PE emissions, in lbs PE/hour, calculated as [(a.) / (c.)] x 0.04 lb PE/ton iron;

e. the VOC emissions (tons); and

f. the rolling, 12-month summation of the VOC emissions (tons).

0.04 lb PE/ton iron is an emission factor in lbs PE per ton iron specified in Table 2.7-1 of Ohio EPA's document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September 1980.

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(C)(1)]

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

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

e) Reporting Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in permit-to-install 02-10374 modification, issued on December 18, 1996: e)(2), e)(3), e)(4), e)(5) and e)(6). The reporting requirements contained in the above - referenced permit-to-install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the permit-to-install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)]

(2) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the average hourly VOC emission rate of 13.5 pounds was exceeded, and the actual average hourly VOC emission rate for each such day.

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

(3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation of 30,000 tons metal, and the actual rolling, 12-month production rate for each such exceedance.

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month VOC emission limitation of 22.5 tons and the actual rolling, 12-month VOC emission rate for each such exceedance.

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

(5) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE shall not exceed 0.40 lb/hr.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(4)d.

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Reference Method 9, if requested, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

[Authority for term: PTI 02-0374, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Emissions of VOC shall not exceed 13.5 lbs/hr, as an average over each day.

Applicable Compliance Method:

Compliance with the VOC emission limitation shall be based on the record keeping requirements specified in d)(3).

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Emissions of VOC shall not exceed 22.5 tpy, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation shall be based on the record keeping requirements specified in d)(3) and d)(4) of these terms. To determine the monthly VOC emission rate (tons), sum the daily VOC emission rate (lbs/day) for the entire month and divide by 2000 (lbs/ton).

[Authority for term: PTI 02-0374 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

3. F018, 722 Pour/cool Line

Operations, Property and/or Equipment Description:

Pouring and cooling area for the molds made on the Osborn 722 molding machine

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO_2) shall not exceed 481.5 lbs/hr. [See b)(2)a.]
b.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
c.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
d.	OAC rule 3745-31-05(A)(3) (PTI 02-9748)	Particulate emissions (PE) shall not exceed 4.0 lbs/hr and 17.6 tpy. Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average. Emissions of volatile organic compounds (VOC) shall not exceed 20 lbs/day and 3.7 tpy. The requirements of OAC rule 3745-31-05(A)(3) shall also include compliance with the requirements of OAC rule 3745-18-06(E)(2).

(2) Additional Terms and Conditions

a. No record keeping and monitoring is required for the SO_2 emissions limit because the maximum uncontrolled emission rate of SO_2 cannot exceed the limit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record daily the hours this emissions unit was operated.

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

(2) At the end of each month, the permittee shall record the following information for each day to determine the emission rates of PE, VOC and SO_2:

a. the total metal production, in tons;

b. the hours this emissions unit was in operation;

c. the amount of iron poured, in tons;

d. the hourly PE rate, in lbs PE/hour, calculated as [(c) X 0.45 lb PE/ton iron poured] / (b);

e. the hourly SO_2 emission rate, in lbs SO_2/hour, calculated as [(c) x 0.02 lb/ton iron poured]/(b); and

f. the daily VOC emission rate, in lbs VOC/day, calculated as [(c) x 0.14 lb/ton iron poured].

0.45 = emission factor in lbs PE per ton of iron poured (from emissions testing performed at this facility on January 18, 1996, for emissions unit P036

0.02 = emission factor in lb SO_2/ton iron poured is specified in US EPA reference document Factor Information Retrieval Data System, Version 6.25 SCC 30400320

0.14 = emission factor in lbs VOC per ton iron poured (from SCC emission factor 30400320)

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the average hourly PE exceeded 4.0 pounds, and the actual average PE rate for each such month.

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

(2) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the daily VOC emissions exceeded 20 pounds, and the actual VOC emissions for each such month.

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

(3) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

(4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Emissions of SO_2 shall not exceed 481.5 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.02 lb SO_2/ton of iron by the maximum amount of metal that can be poured in an hour. 0.02 lb SO_2/ton iron is the emission factor specified in US EPA reference document Factor Information Retrieval Data System, Version 6.25, SCC 30400320.

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

b. Emission Limitation:

PE shall not exceed 4.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(2).

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

c. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Reference Method 9, if requested, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

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

d. Emission Limitation:

Emissions of VOC shall not exceed 20 lbs/day.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(2).

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

e. Emission Limitation:

PE shall not exceed 17.6 tpy.

Applicable Compliance Method:

Compliance shall be determined based upon the summation of the record keeping requirements specified in d)(2).

To determine compliance, the following equation shall be used:

E = (I x 0.45) x 1/2000

where:

E = the tons PE emitted per year;

I = tons of iron poured per year; and

0.45 = emission factor in lbs PE per ton of iron poured (from emissions testing performed at this facility on January 18, 1996, for emissions unit P036).

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

f. Emission Limitation:

Emissions of VOC shall not exceed 3.7 tpy.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(2).

To determine compliance the following equation shall be used:

E = I x 0.14 x 1/2000

where:

E = tons VOC emitted per year;

I = tons of iron poured per year; and

0.14 = emission factor in lbs VOC per ton iron poured (from SCC emission factor 30400320).

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

g) Miscellaneous Requirements

(1) None.

4. F019, Nobake Core Line including mixer

Operations, Property and/or Equipment Description:

Phenolic Urethane nobake core production

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
b.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
c.	OAC rule 3745-31-05(A)(3) (PTI 02-9755)	Particulate emissions (PE) shall not exceed 0.75 lb/hr and 3.3 tpy. Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average. Emissions of volatile organic compounds (VOC) shall not exceed an average of 8 lbs/hr, as an average over each day, 40 lbs/day and 7.3 tpy.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records each day this emissions unit operates:

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

b. the amount of sand mixed, in pounds;

c. the number of hours of operation;

d. the VOC emission factor for the core release being employed, in lbs VOC/ton of sand;

e. an estimate of the daily VOC emission rate, in pounds VOC/day, calculated as (b) x (1.17 + X* lb VOC/ton sand);

f. an estimate of the average hourly VOC emission rate (pounds/hour), calculated as (e/c); and

g. the average hourly PE emissions, in lbs PE/hour, calculated as (b) x 0.38 lb PE/ton sand / (c).

0.38 lb PE/ton sand is the sum of two emission factors: core making (0.35) and mechanical core sand unloading (0.03), both specified in Table 2.7-1 of Ohio EPA's document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September 1980.

*The emission factor for VOC = 1.17 lb VOC/ton sand (resin) + X lb VOC/ton sand (core release, where X is the emission factor for the core release being employed) = 1.17 + X lbs VOC per ton of sand for phenolic urethane nobake binder systems (based on emissions data obtained by the 1997 OCMA study).

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

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

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

* Due to the nature of the operation of this unit (sand is combined with resin and catalyst additions yielding minimal or no visible emissions), monthly visible emission checks are deemed acceptable to ensure ongoing compliance with the particulate emission limitations.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the average hourly VOC emissions exceeded 8.0 pounds, and the actual average hourly VOC emissions for each such day.

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

(2) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the daily VOC emissions exceeded 40 pounds, and the actual daily VOC emissions for each such day.

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

(3) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the average hourly PE emissions exceeded 0.75 pound, and the actual average hourly PE emissions.

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

(4) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 0.75 lb/hr.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(1).

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

b. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Reference Method 9, if requested, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

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

c. Emission Limitation:

Emissions of VOC shall not exceed 40 lbs/day.

Applicable Compliance Method:

Compliance is based upon the record keeping requirements specified in d)(1).

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

d. Emission Limitation:

Emissions of VOC shall not exceed an average of 8 lbs/hr, as an average over each day.

Applicable Compliance Method:

Compliance is based on the record keeping requirements specified in d)(1).

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

e. Emission Limitation:

PE shall not exceed 3.3 tpy.

Applicable Compliance Method:

Compliance shall be determined based upon the summation of the record keeping requirements specified in d)(1).

To determine compliance the following equation shall be used:

E = I x 0.38 x 1/2000

where:

E = tons PE emitted per year;

I = tons of sand used per year; and

0.38 lb PE/ton sand is the sum of two emission factors: core making (0.35) and mechanical core sand unloading (0.03), both specified in Table 2.7-1 of Ohio EPA's document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September 1980.

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

f. Emission Limitation:

Emissions of VOC shall not exceed 7.3 tpy.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(1).

To determine compliance the following equation shall be used:

E = I x 0.14 x 1/2000

where:

E = tons VOC emitted per year;

I = tons of sand poured per year; and

0.14 = emission factor in lbs VOC per ton sand poured (from SCC emission factor 30400320).

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

g) Miscellaneous Requirements

(1) None.

5. F020, Ductile Iron Inoculation Inliner I

Operations, Property and/or Equipment Description:

Sandwich inoculation

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20474)	Particulate emissions (PE) from the baghouse stack serving this emissions unit shall not exceed 0.010 gr/dscf, 4.29 lbs/hr and 18.79 tpy. Particulate fugitive emissions shall not exceed 15.77 tpy. Visible particulate emissions from the baghouse stack shall not exceed 5% opacity, as a 6-minute average. See b)(2)a.
b.	OAC rules 3745-17-07(A) and 3745-17-11(B)	The requirements specified in these rules are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	40 CFR Part 64, Compliance Assurance Monitoring (CAM)	See d)(1), d)(2), d)(3), d)(4), e)(1), e)(4) and e)(5).

(2) Additional Terms and Conditions

a. The collection efficiency of the air pollution capture hoods shall be sufficient to minimize or eliminate visible emissions of fugitive dust at all points of capture. The visible emissions of fugitive dust from the building that encloses this emissions unit shall not exceed 5% opacity, as a 6-minute average.

b. The annual emission limitations above are based on the potential to emit for this unit. Therefore, no monitoring and record keeping requirements are necessary to demonstrate compliance with these limits.

c. This emissions unit is operationally united with P012 (Pangborn South tumblast machine), P013 (South Wheelabrator shotblast machine), P026 (North Wheelabrator shotblast machine), and P040 (Pangborn North tumble blast machine); and all these emissions units are controlled by a common baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) 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 #02-20474, issued on March 8, 2005: 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.

e) Reporting Requirements

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

(2) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: PTI 02-20474 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI 02-20474, OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall submit quarterly reports identifying all months during which a baghouse inspection was not performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #02-20474, issued on March 8, 2005: e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE from the baghouse stack serving this emissions unit shall not exceed 0.010 gr/dscf and 4.29 lbs/hr.

Applicable Compliance Method:

Compliance with the above PE limitations shall be determined by stack testing as specified in f)(2).

The hourly limit of 4.29 pounds per hour is based on a grain loading limit of 0.010 gr/dscf and the gas flow rate for the baghouse of 50,000 SCFM.

[Authority for term: PTI 02-20474, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

PE from the baghouse stack serving this emissions unit shall not exceed 18.79 tpy.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (4.29 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI 02-20474 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Particulate fugitive emissions shall not exceed 15.77 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive emission limitation shall be determined using the following equation:

A = EF x P x (1 - CE) x 8,760 hrs/yr / 2,000 lbs/ton

where:

A = annual fugitive emission rate (tpy);

EF = Emission factor of 4 lbs/ton of iron processed from FIRE Version 6.25, SCC 3-04-003-10;

P = maximum hourly process weight rate (9 tons/hr); and

CE = estimated fractional capture efficiency (0.90).

[Authority for term: PTI 02-20474 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[Authority for term: PTI 02-20474, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

The visible emissions of fugitive dust from the building that encloses this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[Authority for term: PTI 02-20474, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units, P012, P013, P026 and P040 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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

[Authority for term: PTI 02-20474, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

6. F021, Ductile Iron Inoculation Back Floor II

Operations, Property and/or Equipment Description:

Sandwich inoculation

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20346)	Particulate emissions (PE) from the baghouse serving this emissions unit and emissions units P039 and P902 shall not exceed 0.010 gr/dscf, 6.0 lbs/hr and 26.28 tpy. Particulate fugitive emissions shall not exceed 8.76 tpy. Visible particulate emissions from the baghouse stack shall not exceed 5% opacity, as a 6-minute average. See b)(2)a.
c.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rules 3745-17-07(A) and 3745-17-11(B)	The emission limitations specified in these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The collection efficiency of the air pollution capture hoods shall be sufficient to minimize or eliminate visible emissions of fugitive dust at all points of capture. The visible emissions of fugitive dust from the building that encloses this emissions unit shall not exceed 5% opacity, as a 6-minute average.

b. The annual emission limitations above are based on the potential to emit for this unit. Therefore, no monitoring and record keeping requirements are necessary to demonstrate compliance with these limits.

c. This emissions unit is operationally united with P021 (Tabor cut-off saw), P039 (Fischer Pushup/Punchout) and P902 (Back floor mold sand handling system); and all these emissions units are controlled by a common baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI 02-20346 and OAC rule 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(A)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(A)(1)]

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(A)(1)]

(6) 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 #02-20346, issued on February 10, 2005: 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.

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(C)(1)]

(4) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #02-20346, issued on February 10, 2005: 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE from the baghouse serving this emissions unit and emissions units, P039 and P902 shall not exceed 0.010 gr/dscf and 6.0 lbs/hr.

<u>Applicable Compliance Method</u>:

Compliance with the above PE limitations shall be determined by stack testing as specified in f)(2).

The hourly limit of 6.0 pounds per hour is based on a grain loading limit of 0.010 gr/dscf and the gas flow rate for the baghouse of 70,000 SCFM.

[Authority for term: PTI 02-20346, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

PE from the baghouse serving this emissions unit and emissions units P039 and P902 shall not exceed 26.28 tpy.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (6.0 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Particulate fugitive emissions shall not exceed 8.76 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive emission limitation shall be determined using the following equation:

A = EF x P x (1 - CE) x 8,760 hrs/yr / 2,000 lbs/ton

where:

A = annual fugitive emission rate (tpy);

EF = Emission factor of 4 lbs/ton of iron processed from FIRE Version 6.25, SCC 3-04-003-10;

P = maximum hourly process weight rate (5 tons/hr); and

CE = estimated fractional capture efficiency (0.90).

[Authority for term: PTI 02-20346 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[Authority for term: PTI 02-20346, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

The visible emissions of fugitive dust from the building that encloses this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[Authority for term: PTI 02-20346, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units P039 and P902 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and

information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[Authority for term: PTI 02-20346, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

7. F023, Mold Sand Receiving and Transfer

Operations, Property and/or Equipment Description:

Unloading mold sand from trucks and transferring storage hopper/silo

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	In accordance with paragraph (A)(3)(h) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(A) shall not apply to this emissions unit.
b.	OAC rule 3745-17-11(A)	exempt See b)(2)a.
c.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. In accordance with OAC 3745-17-11(A)(2)(a)(ii), "Figure II" of OAC rule 3745-17-11 shall not apply to stack emissions from this emissions unit because the uncontrolled particulate emissions are less than 10 pounds per hour. In accordance with OAC 3745-17-11(A)(2)(b)(ii), "Table I" of OAC rule 3745-17-11 shall not apply to this emissions unit because it is located in Wayne County.

b. The PE from the silos shall be vented to the bin vents serving the silos.

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.

8. F024, Fischer Mold Line

Operations, Property and/or Equipment Description:

Green sand mold making using compression sand into cope and drag flasks

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110564)	Emissions of particulate matter (PM)/particulate matter less than 10 microns in diameter (PM_{10}) shall not exceed 0.40 lb/hr. Organic compounds (OC) emissions shall not exceed 13.35 lbs/hr. Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average.
b.	OAC rule 3745-31-05(D) (PTI 02-20457)	PM/PM_{10} emissions shall not exceed 0.70 tpy based upon a rolling, 12-month period. OC emissions shall not exceed 6.68 tpy based upon a rolling, 12-month period.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(1) Additional Terms and Conditions

a. The hourly emission limitations are based on this emissions unit's potential to emit. Therefore, no record keeping/reporting requirements are necessary to determine compliance with these limits.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c) Operational Restrictions

(1) The maximum annual iron production for this emissions unit shall not exceed 35,000 tpy, based upon a rolling, 12-month summation. The maximum annual OC emissions shall not exceed 6.68 tpy, based upon a rolling, 12-month summation.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

a. the metal production rate for each month; and

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain the following records each month for this emissions unit:

a. the company identification of the mold release used;

b. the total amount of mold release used, in gallons;

c. the OC content of the mold release, in pounds of OC/pound of mold release;

d. the number of hours of operation;

e. an estimate of the total OC emission rate, in pounds, calculated as (b) x (the density of the mold release) x (c);

f. an estimate of the average hourly OC emission rate, calculated as (e/d); and

g. the rolling, 12-month summation of OC emissions.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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 emission incident; and

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

[Authority for term: PTI P0110564 and OAC rule 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 #02-20457, issued on June 2, 2005: d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month metal production rate restriction and of the rolling, 12-month OC emission limitation.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the average hourly OC emissions exceeded the emissions limitation of 13.35 pounds, and the actual average hourly OC emissions.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(3) Quarterly deviation (excursion) reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate

emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(5) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #02-20457, issued on June 2, 2005: e)(5). 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.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) and c)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM/PM_{10} emissions shall not exceed 0.40 lb/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying an emission factor of 0.04 lb of PE/ton of iron specified in Table 2.7-1 of Ohio EPA's document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September 1980 by the maximum hourly production rate of 10 tons/hr.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

OC emissions shall not exceed 13.35 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the recordkeeping requirements specified in d)(2).

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

PM/PM_{10} emissions shall not exceed 0.70 tpy based upon a rolling, 12-month period.

OC emissions shall not exceed 6.68 tpy based upon a rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitations were established by multiplying the maximum annual iron production rate of 35,000 tons by the respective emission factors referenced in f)(1)a and f)(1)b and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual iron production rate, compliance with the emission limitations will be assumed. Compliance with the annual production rate shall be demonstrated by the monitoring and record keeping requirements specified in d)(1).

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated using the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: P0110564 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

9. F025, Fischer Pour and Cool Line

Operations, Property and/or Equipment Description:

Iron pouring and cooling of castings made on the Fischer Mold 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110564)	Particulate matter (PM) emissions shall not exceed 4.50 lbs/hr. Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 2.21 lbs/hr Organic compounds (OC) emissions shall not exceed 1.40 lbs/hr. Carbon monoxide (CO) emissions shall not exceed 29.90 lbs/hr. Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average.
b.	OAC rule 3745-31-05(D) (PTI P0110564)	PM emissions shall not exceed 7.88 tpy based upon a rolling, 12-month period. PM_{10} emissions shall not exceed 3.86 tpy based upon a rolling, 12-month period. OC emissions shall not exceed 2.45 tpy based upon a rolling, 12-month period. CO emissions shall not exceed 52.33 tpy based upon a rolling, 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Total hazardous air pollutants (HAPs) emissions shall not exceed 0.95 tpy based upon a rolling, 12-month period.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. The hourly emission limitations are based on this emissions unit's potential to emit. Therefore, no record keeping or reporting requirements are necessary to determine compliance with these limits.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c) Operational Restrictions

(1) The production of ductile iron through in-mold inoculation shall not be performed in this emissions unit.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

(2) The maximum annual iron production for this emissions unit shall not exceed 35,000 tpy, based upon a rolling, 12-month summation of the production rates.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

a. the metal production rate for each month; and

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

[Authority for term: PTI P0110564 and OAC rule 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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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 emission incident; and

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

[Authority for term: PTI P0110564 and OAC rule 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 #02-20457, issued on June 2, 2005: 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.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the rolling, 12-month iron production rate exceeded the operational restriction of 35,000 tons of iron, and the actual rolling 12-month production rate.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(2) Quarterly deviation (excursion) reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(4) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #02-20457, issued on June 2, 2005: e)(3). The reporting requirements contained

in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PM emissions shall not exceed 4.50 lbs/hr

PM_{10} emissions shall not exceed 2.21 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying an emission factor of 0.45 lb per ton of iron poured (from emissions testing performed at this facility on January 18, 1996, for emissions unit P036) by the maximum hourly production rate of 10 TPH. The PM_{10} emission limit is developed using a ration from USEPA's PM calculator software.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

OC emissions shall not exceed 1.40 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying an emission factor of 0.14 lb/ton from FIRE version 6.25 SCC 3-04-003-20 by the maximum hourly production rate of 10 TPH.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

CO emissions shall not exceed 29.90 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying an emission factor of 2.99 lbs/ton from testing of a similar source at GM's Saginaw MI foundry by the maximum hourly production rate of 10 TPH.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitations:

PM emissions shall not exceed 7.88 tpy based upon a rolling, 12-month period.

PM_{10} emissions shall not exceed 3.86 tpy based upon a rolling, 12-month period.

OC emissions shall not exceed 2.45 tpy based upon a rolling, 12-month period.

CO emissions shall not exceed 52.33 tpy based upon a rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitations were established by multiplying the maximum annual iron production rate of 35,000 tons by the respective emission factors referenced in f)(1)a through f)(1)c and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual iron production rate, compliance with the emission limitations will be assumed. Compliance with the annual production rate shall be demonstrated by the monitoring and record keeping requirements specified in d)(1).

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Total HAP emissions shall not exceed 0.95 tpy based upon a rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the maximum annual iron production rate of 35,000 tons by the emission factors below, summing the total, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual iron production rate, compliance with the emission limitation will be assumed. Compliance with the annual production rate shall be demonstrated by the monitoring and record keeping requirements specified in d)(1).

Emission Factors from "Foundry Process Emission Factors: Baseline Emissions from Automotive Foundries in Mexico," McClellan Air Force Base, California, January, 1999, adjusted to the facility operating parameters.

Acetaldehyde = 0.0099 lb/ton

Analine = 0.0268 lb/ton

Benzene = 0.1654 lb/ton

Ethylbenzene = 0.0081 lb/ton

Formaldehyde = 0.0008 lb/ton

Hexane = 0.0034 lb/ton

Xylenes = 0.0446 lb/ton

Naphthalene = 0.0035 lb/ton

o-Cresol = 0.0136 lb/ton

m,p-Cresol = 0.0043 lb/ton

o-Xylenes = 0.0008 lb/ton

m,p-Xylene = 0.0032 lb/ton

N,N-Dimethylaniline = 0.0062 lb/ton

Naphthenes (cyclo) = 0.0038 lb/ton

Phenol = 0.0526 lb/ton

Propanol = 0.0002 lb/ton

Styrene = 0.0005 lb/ton

Toluene = 0.0709 lb/ton

Antimony = 6.21E-05 lb/ton

Arsenic = 1.14E-05 lb/ton

Cadmium = 5.25E-05 lb/ton

Chromium = 3.79E-04 lb/ton

Cobalt = 5.30E-03 lb/ton

Lead = 8.62E-04 lb/ton

Manganese = 3.16E-03 lb/ton

Nickel = 8.08E-04 lb/ton

Selenium = 2.46E-05 lb/ton

Total HAPs = 0.429 lb/ton

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

10. P002, Fourteen 30" Snag Grinders

Operations, Property and/or Equipment Description:

Fourteen 30" snag grinders used to grind iron castings (only seven units will be operating at any given time).

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)	The requirements established pursuant to OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units P904 and P905 See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-07(A)	The requirements specified in OAC rule 3745-17-07(A) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units P904 and P905.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
e.	OAC rule 3745-31-05(A)(3) (PTI 02-0103)	The requirements established pursuant to OAC rule 3745-31-05(A)(3) for this emissions unit are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units P904 and P905.

(2) Additional Terms and Conditions

a. This emissions unit is operationally united with P904 (auto grinders) and P905 (autogrinders); and these emissions units are controlled by a common baghouse.

b. PE emissions from all fourteen 30" snag grinders (only seven operating at any given time) shall be vented to the baghouse serving P904 and P905.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 02-0103 and OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI 02-0103 and OAC rule 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: PTI 02-0103 and OAC rule 3745-77-07(A)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI 02-0103 and OAC rule 3745-77-07(A)(1)]

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: PTI 02-0103 and OAC rule 3745-77-07(A)(1)]

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions from the baghouse serving emissions units P904 and P905 shall not exceed 0.005 gr/dscf and 5.39 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the emissions testing and procedures specified in f)(2).

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

b. Emission Limitation:

Visible particulate emissions from the baghouse serving emissions units P904 and P905 shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units P904 and P905 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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

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

g) Miscellaneous Requirements

(1) None.

11. P012, South Pangborn Tumblast Machine

Operations, Property and/or Equipment Description:

Tumblast machine used to remove sand from the castings

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	The requirements specified in OAC rule 3745-17-07(A) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units F020 P013, P026, and P040.
b.	OAC rule 3745-17-11(B)	The requirements established pursuant to OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units F020, P013, P026, and P040. See b)(2)a and b)(2)b.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. This emissions unit is operationally united with F020 (sandwich inoculation process for inliner),P013 (South Wheelabrator shotblast machine), P026 (North Wheelabrator shotblast machine) and P040 (Pangborn North tumble blast machine); and all these emissions units are controlled by a common baghouse.

b. Particulate emissions from the tumblast machine shall be vented to the baghouse serving emissions units F020, P013, P026 and P040.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

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

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions from the baghouse serving emissions units F020, P013, P026 and P040 shall not exceed 0.010 gr/dscf and 4.29 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the emissions testing and procedures specified in f)(2).

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

b. Emission Limitation:

Visible particulate emissions from the baghouse serving emissions units F020 P013, P026, and P040 shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

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

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A

d. The test(s) shall be conducted while this emissions unit and emissions units F020, P013, P026 and P040 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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

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

g) Miscellaneous Requirements

(1) None.

12. P013, South Wheelabrator

Operations, Property and/or Equipment Description:

Shot blast machine used to remove sand from castings

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	The requirements specified in OAC rule 3745-17-07(A) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units F020, P012, P026, and P040.
b.	OAC rule 3745-17-11(B)	The requirements established pursuant to OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units F020, P012, P026 and P040. See b)(2)a and b)(2)b.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. This emissions unit is operationally united with F020 (sandwich inoculation process for inliner), P012 (Pangborn South tumblast machine), P026 (North Wheelabrator shotblast machine) and P040 (Pangborn North tumble blast machine); and all these emissions units are controlled by a common baghouse.

b. PE from the shot blast machine shall be vented to the baghouse serving F020, P012, P026 and P040.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

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

(4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

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

e) Reporting Requirements

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

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

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the baghouse serving emissions units F020, P013, P026, and P040 shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

b. Emission Limitation:

Particulate emissions from the baghouse serving emissions units F020, P013, P026 and P040 shall not exceed 0.010 gr/dscf and 4.29 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the emissions testing and procedures specified in section f)(2).

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

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

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units F020, P012, P026 and P040 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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

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

g) Miscellaneous Requirements

(1) None.

13. P021, Tabor Cut-off Saw

Operations, Property and/or Equipment Description:

Saw (#34279) used to remove gates and risers from the casting.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	The requirements specified in OAC rule 3745-17-07(A) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units P902 and P906.
b.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
c.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
d.	OAC rule 3745-31-05(A)(3) (PTI 02-3070)	The requirements established pursuant to OAC rule 3745-31-05(A)(3) for this emissions unit are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units P902 and P906.
e.	OAC rule 3745-17-11(B)	The requirements established pursuant to OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units P902 and P906.

(2) Additional Terms and Conditions

a. This emissions unit is operationally united P902 (Back floor mold sand handling system) and P906 (secondary shakeout); and all these emissions units are controlled by a common baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

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

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions from the baghouse serving emissions units P902 and P906 shall not exceed 0.010 gr/dscf and 6.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the emissions testing and procedures specified in f)(2).

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

b. Emission Limitation:

Visible particulate emissions from the baghouse serving emissions units P902 and P906 shall not exceed 5% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 of 40 CFR Part 60, Appendix A. Method 9 readings shall be performed during each test run.

d. The test(s) shall be conducted while the emissions unit and emissions units P902 and P906 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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

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

g) Miscellaneous Requirements

(1) None.

14. P025, Scrap preheater

Operations, Property and/or Equipment Description:

Gas fired heater used to dry the scrap before it enters the melt furnaces-10 million BTU/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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(A)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	In accordance with paragraph (A)(3)(h) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(A) shall not apply to this emissions unit.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. In accordance with OAC 3745-17-11(A)(2)(a)(ii), "Figure II" of OAC rule 3745-17-11 shall not apply to this emissions unit because the uncontrolled particulate emissions are less than 10 pounds per hour. In accordance with OAC 3745-17-11(A)(2)(b)(ii), "Table I" of OAC rule 3745-17-11 shall not apply to this emissions unit because it is located in Wayne County.

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.

15. P026, North Wheelabrator

Operations, Property and/or Equipment Description:

Shot blast machine used to remove sand from castings.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)	The requirements established pursuant to OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3). [See b)(2)a.]
b.	OAC rule 3745-17-07(A)	The requirements specified in OAC rule 3745-17-07(A) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3) for emissions units F020, P012, P013, and P040.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
e.	OAC rule 3745-31-05(A)(3) (PTI 02-1952)	Particulate emissions (PE) from the baghouse shall not exceed 0.010 gr/dscf of exhaust gases, 4.29 lb/hr and 18.77tpy. Fugitive particulate emissions shall not exceed 3.1 tpy. Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

(2) Additional Terms and Conditions

a. This emissions unit is operationally united with F020 (sandwich inoculation for inliner), P012 (Pangborn South tumblast machine), P013 (South Wheelabrator shotblast machine) and P040 (Pangborn North tumble blast machine), and all these emissions units are controlled by a common baghouse.

b. PE from this shot blast machine shall be vented to the baghouse serving F020, P012, P013, and P040.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 02-1952 and OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI 02-1952 and OAC rule 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: PTI 02-1952 and OAC rule 3745-77-07(A)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI 02-1952 and OAC rule 3745-77-07(A)(1)]

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: PTI 02-1952 and OAC rule 3745-77-07(A)(1)]

(6) 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 02-11952, issued on May 28, 1998: d)(2), d)(3) and d)(4). The monitoring and record keeping requirements contained in the above-referenced permit-to-install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the permit-to-install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)]

e) Reporting Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in permit-to-install 02-11952, issued on May 28, 1998: e)(2), e)(3) and e)(4). The reporting requirements contained in the above-referenced permit-to-install are subsumed into the

reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the permit-to-install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)]

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

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

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

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

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

f) Testing Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in permit-to-install 02-11952, issued on May 28, 1998: f)(2) and f)(3). The testing requirements contained in the above-referenced permit-to-install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the permit-to-install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)]

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the baghouse serving F020, P012, P013, and P040 shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

b. Emission Limitation:

PE from the baghouse shall not exceed 0.010 gr/dscf of exhaust gases and 4.29 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the emissions testing and procedures specified in f)(3).

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

c. Emission Limitation:

PE from the baghouse shall not exceed 18.77tpy.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (4.29 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

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

d. Emission Limitation:

Fugitive PE shall not exceed 3.1 tpy.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

E = Ti x 7 lbs PE/ton iron x (1-0.98) x 1tn/2000 lbs

where:

E = tons PE per year;

Ti = tons of iron processed per year; and

0.98 = the assumed overall control efficiency of the baghouse.

The emission factor of 7 lbs PE/ton iron was provided by the NEDO.

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units F020, P012, P013 and P040 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and

information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

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

g) Miscellaneous Requirements

(1) None.

16. P027, Simpson Muller

Operations, Property and/or Equipment Description:

Green sand muller which makes mold sand for the Osborn Inliner molding system

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)	Particulate emissions (PE) shall not exceed 10.71 pounds per hour. See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
e.	40 CFR Part 64, Compliance Assurance Monitoring (CAM)	See sections c)(1), d)(1) through d)(3) and e)(1) through e)(3).

(2) Additional Terms and Conditions

a. The allowable PE rate is from Figure II and is based upon the uncontrolled mass rate of emissions (74.5 lbs/hr) as reported for the emissions test conducted on November 7, 2007.

b. PE from the muller shall be vented to a baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall submit quarterly reports identifying all months during which a baghouse inspection was not performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

b. Emission Limitation:

PE shall not exceed 10.71 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated through emission testing and procedures specified in f)(2).

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

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

e. A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

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

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

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

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

g) Miscellaneous Requirements

(1) None.

17. P029, Holding Furnace #6

Operations, Property and/or Equipment Description:

20 ton graphite rod "holding furnace"

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
b.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
c.	OAC rule 3745-31-05(A)(3) (PTI 02-9649)	Fugitive particulate emissions (PE) shall not exceed 4.26 pounds per hour. Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) This furnace shall not be used as a melting furnace. Prior to modifying this furnace in order to melt scrap, the permittee shall apply for and obtain a permit-to-install.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions

unit. The presence or absence of any visible 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 emission incident; and

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

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

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

<u>Applicable Compliance Method</u>:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

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

b. Emission Limitation:

Fugitive PE shall not exceed 4.26 pounds per hour.

Applicable Compliance Method:

To determine the actual emission rate for fugitive particulates, the following equation may be used:

E = maximum iron throughput (in tons per hour) X 0.056 (lb/ton)

where:

E = PE (lbs/hr).

The emission factor (0.056 lb PE/ton iron) is specified in US EPA reference document AP-42, Compilation of Emission Factors, Section 12.5, Table 12.5-1 (1/95).

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

g) Miscellaneous Requirements

(1) None.

18. P030, Laempe LL-5

Operations, Property and/or Equipment Description:

Resin based core making operation controlled with an acid scrubber.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110563)	Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.004 lb/hr and 0.004 tpy. Fugitive PE from this emissions unit shall not exceed 0.18 tpy. Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.41 lb/hr and 0.41 tpy. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.
b.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pH of the scrubbing liquor shall be maintained between 2.0 and 4.5.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

(2) In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 1,000 tpy, as a rolling, 12-month summation.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

a. the pH of the scrubber liquor; and

b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

[Authority for term: PTI P0110563 and OAC rule 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 particulate emissions from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain monthly records of the following information:

a. The total production rate, in terms of sand processed, in tons per month, and

b. The rolling 12-month summations of the monthly total production rate, in terms of sand processed.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitations</u>:

PE from all stacks associated with this emissions unit shall not exceed 0.004 lb/hr and 0.004 tpy.

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum hourly production rate of 0.50 ton/hr and a control efficiency of 99 percent.

Compliance with the annual emission limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum annual sand processed (1000 tpy) and by a control efficiency of 99%, and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Fugitive PE from this emissions unit shall not exceed 0.18 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be demonstrated by multiplying an emission factor of 0.35 lb/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980 by the maximum annual sand processed (1000 tpy), and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 0.41 lb/hr and 0.41 tpy.

Applicable Compliance Method:

The hourly VOC emissions limitation is based upon the potential to emit for this emissions unit. The annual VOC emissions limitation is based on the production restriction of 1,000 tons of sand per year. Therefore, as long as compliance with the production restriction is maintained, compliance with the annual emissions limitation is assumed. Compliance with the production restriction is based upon the record keeping requirements specified in d)(3).

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

19. P031, South Laempe L-20

Operations, Property and/or Equipment Description:

Sand cores are made using an L-20 size Laempe core machine.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20073)	Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.01 tpy. Fugitive particulate emission (PE) from this emissions unit shall not exceed 0.53 tpy. Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.84 lbs/hr and 1.58 tpy. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.
b.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
c.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pH of the scrubbing liquor shall be maintained between 2.0 and 4.5.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

(2) In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 3,000 tpy, as a rolling, 12-month summation.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation and the DMIPA catalyst system is being used. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day that this emissions unit operates:

a. the pH of the scrubber liquor; and

b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

[Authority for term: PTI P0110563 and OAC rule 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 particulate emissions from the scrubber serving this emissions unit and for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain monthly records of the following information:

a. the total production rate, in terms of sand processed, in tons per month; and

b. the rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production restriction.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitations</u>:

PE from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.01 tpy.

<u>Applicable Compliance Method</u>:

Compliance with the hourly PE limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the

document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum hourly production rate of 0.80 ton/hr and a control efficiency of 99 percent.

Compliance with the annual emission limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum annual sand processed (3000 tpy) and by a control efficiency of 99%, and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Fugitive PE from this emissions unit shall not exceed 0.53 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be demonstrated by multiplying an emission factor of 0.35 lb/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980 by the maximum annual sand processed (3000 tpy), and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 0.84 lb/hr and 1.58 tpy.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 3,000 tons of sand per year. Therefore, as long as compliance with the operational and production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping requirements specified in d)(3).

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible particulate emissions from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

20. P032, Laempe L-40

Operations, Property and/or Equipment Description:

Sand cores are made using an L-40 size Laempe core machine.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110563)	Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.02 tpy. Fugitive PE from this emissions unit shall not exceed 1.05 tpy. Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 1.58 lbs/hr and 3.15 tpy. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.
b.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pH of the scrubbing liquor shall be maintained between 2.0 and 4.5.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

(2) In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 6,000 tpy, as a rolling, 12-month summation.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation and the DMIPA catalyst system is being used. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall collect and record the following information each day that this emissions unit operates:

a. the pH of the scrubber liquor; and

b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall maintain monthly records of the following information:

a. the total production rate, in terms of sand processed, in tons per month; and

b. the rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production restriction.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PE from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.02 tpy.

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum hourly production rate of 1.50 tons/hr and a control efficiency of 99 percent.

Compliance with the annual emission limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum annual sand processed (6000 tpy) and by a control efficiency of 99%, and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Fugitive PE from this emissions unit shall not exceed 1.05 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be demonstrated by multiplying an emission factor of 0.35 lb/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980 by the maximum annual sand processed (6000 tpy), and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 1.58 lbs/hr and 3.15 tpy.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 6,000 tons of sand per year. Therefore, as long as compliance with

the production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping requirements specified in d)(3).

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

21. P033, East Laempe L-20

Operations, Property and/or Equipment Description:

Sand cores are made using an L-20 size Laempe core machine.

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) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0116370)	Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.01 tpy. Fugitive PE from this emissions unit shall not exceed 0.53 tpy. Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.84 lbs/hr and 1.58 tpy. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.
b.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pH of the scrubbing liquor shall be maintained between 2.0 and 4.5.

[Authority for term PTI P0116370 and OAC rule 3745-77-07(A)(1)]

(2) Annual production from this emissions unit, in terms of sand processed, shall not exceed 3,000 tpy, based on a rolling, 12-month summation of the monthly production rates.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

a. the pH of the scrubber liquor; and

a log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

[Authority for term: PTI P0116370 and OAC rule 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 particulate emissions from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain monthly records of the following information:

a. the total production rate, in terms of sand processed, in tons per month; and

b. the rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production restriction.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PE from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.01 tpy.

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum hourly production rate of 2.00 tons/hr and a control efficiency of 99 percent.

Compliance with the annual emission limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum annual sand processed (3000 tpy) and by a control efficiency of 99%, and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Fugitive PE from this emissions unit shall not exceed 0.53 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be demonstrated by multiplying an emission factor of 0.35 lb/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980 by the maximum annual sand processed (3000 tpy), and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 10.84 lbs/hr and 1.58 tpy.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 3,000 tons of sand per year. Therefore, as long as compliance with the production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping requirements specified in d)(3).

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was performed and the predicted 1-hour maximum ground-level concentration was less than 80 percent of the MAGLC. Therefore, the air toxic demonstration is not part of this final permit. OAC Chapter 3745-31 requires permittees 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 changes in the composition of the materials, or use of new materials, that would cause the emissions of any air toxic to increase may require the permittee to apply for and obtain a new permit to install.

[Authority for term: PTI P0116370 and OAC rule 3745-77-07(C)(1)]

22. P034, West Laempe L-20

Operations, Property and/or Equipment Description:

Sand cores are made using an L-20 size Laempe core machine.

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) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110563)	Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.01 tpy. Fugitive PE from this emissions unit shall not exceed 0.53 tpy. Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.84 lb/hr and 1.58 tpy. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.
b.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pH of the scrubbing liquor shall be maintained between 2.0 and 4.5.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

(2) In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 3,000 tpy, as a rolling, 12-month summation.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

a. the pH of the scrubber liquor; and

b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

[Authority for term: PTI P0110563 and OAC rule 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 particulate emissions from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain monthly records of the following information:

a. the total production rate, in terms of sand processed, in tons per month; and

b. the rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production restriction.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PE from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.01 tpy.

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum hourly production rate of 0.80 ton/hr and a control efficiency of 99 percent.

Compliance with the annual emission limitation shall be demonstrated by multiplying an emission factor of 0.72 lb/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01 by the maximum annual sand processed (3000 tpy) and by a control efficiency of 99%, and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Fugitive PE from this emissions unit shall not exceed 0.53 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be demonstrated by multiplying an emission factor of 0.35 lb/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980 by the maximum annual sand processed (3000 tpy), and then dividing by 2000 lbs/ton.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 0.84 lb/hr and 1.58 tpy.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 3,000 tons of sand per year. Therefore, as long as compliance with the production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping requirements specified in d)(3).

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the increase in emissions due to the modification(s) to the emissions unit was less than 1 tpy of each toxic 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").

[Authority for term: PTI P0110563 and OAC rule 3745-77-07(C)(1)]

23. P036, Inliner Pour/cool line

Operations, Property and/or Equipment Description:

Pouring and cooling area for the molds made on the Osborn Inliner automatic molding machine

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO2) shall not exceed 782 pounds per hour. See b)(2)c.
b.	OAC rule 3745-17-07(A)	In accordance with paragraph (A)(3)(h) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(A) shall not apply to this emissions unit.
c.	OAC rule 3745-17-11(B)	See b)(2)a.
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
f.	OAC rule 3745-31-05(A)(3) (PTI 02-9754)	Fugitive and stack particulate emissions (PE), combined, shall not exceed 9.9 pounds per hour. Visible fugitive and/or stack particulate emissions shall not exceed 20% opacity, as a 6-minute average. Fugitive and stack volatile organic compound (VOC) emissions, combined, shall not exceed 2.8 pounds per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)b. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-18-06(E)(2).

(2) Additional Terms and Conditions

a. In accordance with OAC 3745-17-11(A)(2)(a)(ii), "Figure II" of OAC rule 3745-17-11 shall not apply to this emissions unit because the uncontrolled particulate emissions are less than 10 pounds per hour. Based on the results of emissions testing conducted on January 18, 1996 and a maximum iron pour rate of 20 tons per hour, the maximum uncontrolled particulate matter emission rate is 9 pounds per hour. In accordance with OAC 3745-17-11(A)(2)(b)(ii), "Table I" of OAC rule 3745-17-11 shall not apply to this emissions unit because it is located in Wayne County.

b. The pouring and cooling emissions are captured in hooding and vented outside the building through six (6) stacks. The collection efficiency of the capture hoods shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition. Additional capture hooding or enclosures shall be installed if required by the Ohio EPA.

c. No record keeping and monitoring is required for the SO_2 emission limit because the maximum uncontrolled emission rate of SO_2 cannot exceed the limit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) At the end of each month, the permittee shall record the following information for each day to determine the emission rates of PE, VOC and SO_2:

a. the total metal production, in tons;

b. the hours this emissions unit was in operation;

c. the amount of iron poured, in tons;

d. the hourly PE rate, in lbs PE/hour, calculated as [(c) X 0.45 lb PE/ton iron poured] / (b);

e. the hourly SO_2 emission rate, in lbs SO_2/hour, calculated as [(c) x 0.02 lb/ton iron poured]/(b); and

f. the hourly VOC emission rate, in lbs VOC/hour, calculated as [(c) x 0.14 lb/ton iron poured]/(b).

0.45 = emission factor in lbs PE per ton of iron poured (from emissions testing performed at this facility on January 18, 1996, for emissions unit P036

0.02 = emission factor in lb SO_2/ton iron poured is specified in US EPA reference document Factor Information Retrieval Data System, Version 6.25 SCC 30400320

0.14 = emission factor in lbs VOC per ton iron poured (from SCC emission factor 30400320)

[Authority for term: OAC rule 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 particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the average hourly VOC emissions exceeded 2.8 pounds per hour, and the actual average hourly VOC emissions for each such day.

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

(2) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

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

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

(4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA

Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Emissions of SO_2 shall not exceed 782 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined in accordance with the following method:

Compliance shall be demonstrated by multiplying the maximum production rate (tons iron/hour) by 0.02 lb SO_2/ton iron.

The emission factor (0.02 lb SO_2/ton iron) is specified in US EPA reference document Factor Information Retrieval Data System, Version 6.25, SCC 30400320.

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

b. Emission Limitation:

Visible fugitive and/or stack particulate emissions shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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

c. Emission Limitation:

Fugitive and stack VOC emissions, combined, shall not exceed 2.8 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in d)(1).

To determine the actual daily emission rate for VOC, the following equation shall be used:

E = daily iron production rate (in tons per day) X 0.14 lb VOC/ton iron

where:

E = VOC emission rate (lbs/day); and

0.14 lb VOC/ton iron is an emission factor specified in US EPA reference document Factor Information Retrieval Data System, Version 6.25, SCC 30400320.

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

d. Emission Limitation:

Fugitive and stack PE, combined, shall not exceed 9.9 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined in accordance with the following methods:

Compliance may be demonstrated by multiplying the maximum production rate (tons iron/hour) by 0.45 lb PE/ton iron.

The emission factor (0.45 lb PE/ton iron) was determined during a December 12, 1995, emissions test of 5 of the 6 stacks at the facility.

Compliance with the PE limitation of 9.9 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10), if required.

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

g) Miscellaneous Requirements

(1) None.

24. P039, Fischer Pushup/Punchout

Operations, Property and/or Equipment Description:

Removing sand and raw castings from mold by first a pushup action followed by a punchout action into shakeout

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110564)	Emissions of particulate matter (PM)/particulate matter less than 10 microns in diameter (PM_{10}) from the baghouse stack serving this emissions unit and emissions units F021 and P902 shall not exceed 0.010 gr/dscf and 6.0 lbs/hr. Fugitive PM emissions shall not exceed 0.56 tpy. Fugitive PM_{10} emissions shall not exceed 0.39 tpy. Organic compounds (OC) emissions shall not exceed 12.00 lbs/hr. Carbon monoxide (CO) emissions shall not exceed 10.00 lbs/hr. Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average. Visible PE from the baghouse stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.
b.	OAC rule 3745-31-05(D) (PTI P0110564)	PM/PM_{10} emissions from the baghouse stack serving this emissions unit and emissions units F021 and P902 shall not

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		exceed 26.28 tpy based upon a rolling, 12-month period. Fugitive PM_{10} emissions shall not exceed 0.39 tpy based upon a rolling, 12-month period. OC emissions shall not exceed 21.00 tpy based upon a rolling, 12-month period. CO emissions shall not exceed 17.50 tpy based upon a rolling, 12-month period.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The hourly emission limitations are based on this emissions unit's potential to emit. Therefore, no record keeping or reporting requirements are necessary to determine compliance with these limits.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c) Operational Restrictions

(1) The maximum annual iron production for this emissions unit shall not exceed 35,000 tpy, based upon a rolling, 12-month summation of the production rates.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

(2) The pressure drop across the baghouse shall be maintained within the range of 2.0 to 6.0 inches of water column while the emissions unit is in operation.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

a. the metal production rate for each month; and

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the rolling, 12-month iron production rate exceeded the operational restriction of 35,000 tons of iron, and the actual rolling, 12-month production rate.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(3) Quarterly deviation (excursion) reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(5) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PM/PM_{10} emissions from the baghouse stack serving this emissions unit and emissions units F021 and P902 shall not exceed 0.010 gr/dscf and 6.0 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly and grain loading emission limits shall be demonstrated by stack testing as specified in f)(2).

The hourly limit of 6.0 lbs/hr is based on a grain loading limit of 0.010 gr/dscf and the gas flow rate for the baghouse of 70,000 scfm.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitations:

Fugitive PM emissions shall not exceed 0.56 tpy.

Fugitive PM_{10} emissions shall not exceed 0.39 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive emission limitations shall be demonstrated using the following equation:

A = EF x P x (1 - CE) x / 2,000 lbs/ton

where:

A = annual fugitive emission rate (tpy);

EF = emission factor of 3.20 lbs of PM/ton from FIRE ver 6.25 SCC 3-04-003-31;

= emission factor of 2.24 lbs of PM_{10}/ton from FIRE ver 6.25 SCC 3-04-003-31;

P = maximum annual process weight rate (35,000 tpy); and

CE = fractional capture efficiency of baghouse = 0.99.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

OC emissions shall not exceed 12.00 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying an emission factor of 1.20 lbs/ton from FIRE version 6.25 SCC 3-04-003-31 by the maximum hourly production rate of 10 TPH.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

CO emissions shall not exceed 10.00 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying an emission factor of 1.00 lb/ton from Waupaca foundry RBLC determination in Indiana by the maximum hourly production rate of 10 TPH.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

PM/PM_{10} emissions from the baghouse stack serving this emissions unit and emissions units F021 and P902 shall not exceed 26.28 tpy based upon a rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the allowable grain loading limit for the baghouse stack (0.010 gr/dscf) by the baghouse flow rate of 70,000 scfm and by 60 min/hr and by the maximum operating hours of 8,760 hrs/yr, and then dividing by 7000 gr/lb and by 2000 lbs/ton. Therefore, compliance with the annual limit is assumed, as long as compliance with the grain loading limit is maintained.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

f. Emission Limitations:

Fugitive PM_{10} emissions shall not exceed 0.39 tpy based upon a rolling, 12-month period.

OC emissions shall not exceed 21.00 tpy based upon a rolling, 12-month period.

CO emissions shall not exceed 17.50 tpy based upon a rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitations were established by multiplying the maximum annual iron production rate of 35,000 tons by the respective emission factors referenced in f)(1)a through f)(1)c and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual iron production rate, compliance with the emission limitations will be assumed. Compliance with the annual production rate shall be demonstrated by the monitoring and record keeping requirements specified in section d)(1).

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions of fugitive dust emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

Visible PE from the baghouse stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units F021 and P902 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

25. P040, Pangborn North Tumble Blast

Operations, Property and/or Equipment Description:

Pangborn North tumble blast machine used to clean sand from iron castings with steel shot.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-22041)	Particulate emissions (PE) from the baghouse shall not exceed 0.010 grain per dry standard cubic foot of total exhaust gases, 4.29 lb/hr and 18.77 tpy. Visible PE from the stack of the baghouse serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Emissions of fugitive dust shall not exceed 1.04 tpy. Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.
b.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	See b)(2)a.
c.	OAC rule 3745-17-07(B)	See b)(2)b.
d.	OAC rule 3745-17-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

a. The emission limitations required by these applicable rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

b. In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

c. In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.

d. This emissions unit is operationally united with F020 (sandwich inoculation process for inliner), P012 (Pangborn South tumble blast machine), P013 (South Wheelabrator shotblast machine), P026 (North Wheelabrator), and P040 (North Pangborn) and all these emissions units are controlled by a common baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI 02-22041 and OAC rule 3745-77-07(A)(1)]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(A)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(A)(1)]

e) Reporting Requirements

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

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month period.

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE shall not exceed 0.010 grain per dry standard cubic foot of total exhaust gases, 4.29 lb/hr and 18.77 tpy.

Applicable Compliance Method:

Compliance with the grain loading limit and hourly limit above shall be determined through stack testing as specified in f)(2).

The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.64 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI 02-22041, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Emissions of fugitive dust shall not exceed 1.04 tpy.

Applicable Compliance Method:

The annual emission limitation above was created using the following equation:

E = PWR x EF x (1 - CE) x (1 - BCE) x (8,760 hrs/yr) / (2,000 lbs/ton)

where:

E = hourly fugitive dust emission rate (lbs/hr);

PWR = maximum hourly process weight rate (10 tons/hr);

EF = emission factor of 7.0 lbs/ton of material processed per 11/97 stack test;

CE = fractional capture efficiency (0.99); and

BCE = fractional building capture efficiency (0.66, based on AP-42, Section 12.10 "Gray Iron Foundries" Background Document).

[Authority for term: PTI 02-22041 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Visible PE from the stack of the baghouse serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

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

[Authority for term: PTI 02-22041, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

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

[Authority for term: PTI 02-22041, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit andF020, , P012, P013, P026, and P040 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office

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

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

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

[Authority for term: PTI 02-22041, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

26. P043, Laempe LB-50 Core Shooter

Operations, Property and/or Equipment Description:

Laempe LB-50 Core Shooter

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 paragraph 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.02 tpy. Fugitive PE from this emissions unit shall not exceed 0.88 tpy. Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 1.58 lbs/hr and 2.63 tpy. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average. See b)(2)a.
b.	OAC paragraph 3745-31-05(A)(3)(b) as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05,

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the following emission limitation shall apply: PE from all stacks associated with this emissions unit shall not exceed 75 lbs/hr.
d.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, the following emission limitation shall apply: Visible PE from any stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-17-08(B)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
f.	OAC rule 3745-17-07(B)	This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

(2) Additional Terms and Conditions

a. 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 pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(A)(1)]

b. 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.

The Best Available Technology requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and VOC emissions from this air contaminant source since the annual emissions are less than 10 tons per year.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(A)(1)]

c) Operational Restrictions

(1) The pH of the scrubbing liquor shall be maintained between 0.0 and 4.5.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(A)(1)]

(2) In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 5,000 tpy, as a rolling, 12-month summation.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation and the DMIPA catalyst system is being used. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall collect and record the following information each day that this emissions unit operates:

a. the pH of the scrubber liquor; and

b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

(3) Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, the following monitoring and record keeping requirement shall be void:

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(A)(1)]

(4) Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, the following monitoring and record keeping requirement shall appy:

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

(5) The permittee shall maintain monthly records of the following information:

a. the total production rate, in terms of sand processed, in tons per month; and

b. the rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

(2) Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, the following reporting requirement shall be void:

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

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

(3) Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, the following reporting requirement shall appy:

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

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production restriction.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PE from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.02 tpy.

Applicable Compliance Methods:

Compliance with the hourly PE limitation shall be determined by multiplying an emission factor of 0.72 lb/ton of sand processed by the maximum hourly production rate (1.50 tons/hr) and by a control efficiency of 99%. The emission factor was obtained from the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, Table 11.12-2, dated 10/01.

Compliance with the annual PE limitation shall be determined by multiplying an emission factor of 0.72 lb/ton of sand processed by the maximum annual production rate (5000 tons/yr) and by a control efficiency of 99%, and then dividing by 2000 lbs/ton. The emission factor was obtained from the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, Table 11.12-2, dated 10/01.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, the following emission limitation shall apply:

PE from all stacks associated with this emissions unit shall not exceed 75.0 lbs/hr.

Applicable Compliance Method:

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

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Fugitive PE from this emissions unit shall not exceed 0.88 tpy.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be determined by multiplying an emission factor of 0.35 lb/ton by the maximum annual production

rate (5000 tons/yr) and then divide by 2000 lbs/ton. The emission factor was obtained from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 1.58 lbs/hr and 2.63 tpy.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 5,000 tons of sand per year. Therefore, as long as compliance with the production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping requirement specified in d)(5).

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, the following emission limitation shall apply:

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

Applicable Compliance Method:

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

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, except that the

data reduction and average opacity calculation shall be based upon sets of 12 consecutive visible particulate emission observations recorded at 15-second intervals.

[Authority for term: PTI P0110565 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

27. P901, Inliner Shakeout

Operations, Property and/or Equipment Description:

Shakeout for the Osborn Inliner automatic molding machine

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the baghouse and the stack serving the cooling conveyor, combined, shall not exceed 59.5 pounds per hour. See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
d.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
e.	40 CFR, Part 64, Compliance Assurance Monitoring (CAM)	See sections c)(1), d)(1) through d)(3) and e)(1) through e)(3).

(2) Additional Terms and Conditions

a. This emissions unit is operationally united with P903 (Inliner shakeout sand recycle system) and is controlled by a common baghouse. The allowable emission rate from the baghouse for these units was determined by using Figure II and an uncontrolled emission rate of 734 pounds per hour of particulate emissions, as determined in an October 8, 2003, emissions test.

b. PE from the punchout, scalping conveyor, shakeout deck and cooling conveyor shall be vented to the baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from 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 emission incident; and

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

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

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall submit quarterly reports identifying all months during which a baghouse inspection was not performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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

b. Emission Limitation:

PE from the baghouse and the stack serving the cooling conveyor, combined, shall not exceed 59.5 pounds per hour.

Applicable Compliance Method:

Compliance with the PE limitation shall be determined in accordance with OAC rule 3745-17-03(B)(10).

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

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PE: Methods 1 through 5 of 40 CFR Part 60, Appendix A; and

for opacity: Method 9 of 40 CFR Part 60, Appendix A (opacity readings of the stacks during each test run).

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

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

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

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

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

g) Miscellaneous Requirements

(1) None.

28. P902, Back Floor Mold Sand Handling System

Operations, Property and/or Equipment Description:

Moves sand from the P906 Manipulator through the screening, cooling, preparation, and mixing operations at the East End Muller (previously P023) to the Fischer and 722 Mold Lines.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0110564)	Particulate emissions (PE) from the baghouse stack shall not exceed 0.010 gr/dscf of exhaust gases, 3.49 pounds per hour and 15.30 tpy. Fugitive PE shall not exceed 8.10 tpy. Fugitive emissions of particulate matter less than 10 microns in diameter (PM_{10}) shall not exceed 1.22 tpy. Visible particulate emissions from the baghouse stack shall not exceed 5% opacity, as a 6-minute average. See b)(2)a, b)(2)b and b)(2)c.
b.	OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
f.	40 CFR Part 64, Compliance Assurance Monitoring (CAM)	See sections c)(1), d)(1), d)(2), d)(6), e)(1), e)(3) and e)(5).

(2) Additional Terms and Conditions

a. All sand processing equipment shall be fully enclosed and shall be exhausted to the baghouse. This shall include the rotary screen, the sand cooler and cyclone and the return sand storage silo.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

b. All material handling equipment, except the final belt conveyor, shall be covered and shall be exhausted to the baghouse. This shall include the belt conveyor from the existing shakeout, the transfer point at the cross magnetic belt conveyor, the belt conveyors to the sand cooler and the vibrating feed conveyor. The final belt conveyor to the existing sand muller shall be enclosed at the head and tail end and shall be exhausted to the baghouse.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c. The collection efficiency of the air pollution capture hoods shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The visible emissions of fugitive dust from the building that encloses this emissions unit shall not exceed 5% opacity, as a 6-minute average.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 2.0 to 6.0 inches of water while the emissions unit is in operation.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

(2) The maximum annual production rate for this emissions unit shall not exceed 450,000 tons of sand, based upon a rolling, 12-month summation.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall maintain monthly records of the following information:

a. the sand throughput rate, in tons; and

b. the rolling, 12-month summation of the sand throughput rates;

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(5) To determine compliance with the annual fugitive PE and PM_{10} limitations, the permittee shall record the amount of sand handled by this emissions unit, in tons, on a monthly basis.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(6) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(2) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit quarterly deviation (excursion) reports that identify each month the rolling, 12-month production rate was exceeded.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

(6) The permittee shall submit quarterly reports identifying all months during which a baghouse inspection was not performed.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

Visible particulate emissions from the baghouse stack shall not exceed 5% opacity, as a 6-minute average.

The visible emissions of fugitive dust from the building that encloses this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitations:

PE from the baghouse stack shall not exceed 0.010 gr/dscf of exhaust gases and 3.49 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the emission testing and procedures specified in f)(2).

The hourly limit of 3.49 pounds per hour is based on a grain loading limit of 0.01 gr/dscf and the gas flow rate from this emissions unit of 40,750 SCFM.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

PE from the baghouse stack shall not exceed 15.30 tpy.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (3.49 lbs/hr) by the potential annual hours of operation (8760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Fugitive PE shall not exceed 8.10 tpy.

Applicable Compliance Method:

Compliance with the fugitive PE emission limit shall be determined in accordance with the following equation:

E = Ts x 3.6 (lbs PM/ton sand) x (1-0.99) x 1/2000 (ton/pounds)

where:

E = tons PM emitted per year;

Ts = actual amount of sand processed per year (tons);

3.6 lbs PE/ton sand is the emission factor from AP-42 Table 12.10-7 (1/95 update), for sand handling; and

0.99 (99%) is the assumed collection efficiency of the air pollution capture hoods.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Fugitive emissions of PM_{10} shall not exceed 1.22 tpy.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limit shall be determined in accordance with the following equation

E = Ts x 0.54 (lbs PM-10/ton sand) x (1-0.99) x 1/2000 (ton/pounds)

where:

E = tons PM-10 emitted per year;

Ts = actual amount of sand processed per year (tons);

0.54 lb PM-10/ton sand is an emission factor submitted in the application for PTI 02-11040 and is based on U.S. EPA document "PM-10 Emission Factor Listing Developed by Technology Transfer, 3-04-003-50"; and

0.99 (99%) is the assumed collection efficiency of the air pollution capture hoods.

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PE - Methods 1 through 5 of 40 CFR Part 60, Appendix A; and

for opacity - Method 9 of 40 CFR Part 60, Appendix A (opacity readings for each sampling run).

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

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

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

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

[Authority for term: PTI P0110564 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

29. P904, Foxall Auto Grind System

Operations, Property and/or Equipment Description:

Foxall automatic finish grinding system.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-22679)	Particulate emissions (PE) from the baghouse stack and any fugitive egress points shall be no more than 0.42 tpy. See b)(2)a.
b.	OAC rule 3745-17-11(B)	None [See b)(2)b.]
c.	OAC rule 3745-17-07(A)	None [See b)(2)c.]
d.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
e.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

(2) Additional Terms and Conditions

a. Permit-to-install 02-22679 for this air contaminant source takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum control efficiency of 99%, by weight for PE, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table I does not apply because the facility is located in Wayne County.

c. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

d. This emissions unit is operationally united with P002 (Snag Grinders), P905 (Auto Grinder), Hand Grinding, and Swing Grinders; and all these emissions units are controlled by a common baghouse.

e. PE emissions from P904 shall be vented to the baghouse serving the Swing Grinders, Hand Grinders, P002, and P905.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 02-22679 and OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 8.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 8.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI 02-22679 and OAC rule 3745-77-07(A)(1)]

e) Reporting Requirements

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

[Authority for term: PTI 02-22679 and OAC rule 3745-77-07(C)(1)]

(2) The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI 02-22679 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE from the baghouse stack and any fugitive egress points shall be no more than 0.42 tpy.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable PE limitation above using the following equation:

PE = [[EF x P x (Ca) x (1 - Co)] + [EF x P x (1 - Ca) x (1 - Bca)]] x 8,760 hrs/yr / 2,000 lbs/ton

where:

PE = maximum annual emission rate;

EF = emission factor (1.6 lbs/ton of iron from "An Inventory of Iron Foundry Emissions," by Bernard S. Gutow, Modern Casting, January 1972);

P = maximum hourly process weight rate, 4.5 tons per hour;

Ca = estimated fractional capture efficiency, 0.99;

Co = manufacturer's rated fractional control efficiency, 0.99; and

Bca = fractional building capture efficiency, 0.66 (this value is used for cleaning and finishing emissions only as derived from AP-42, Table 17.10-7.

[Authority for term: PTI 02-22679 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

30. P905, Foxall Auto Grind System

Operations, Property and/or Equipment Description:

Foxall automatic finish grinding system.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)	Particulate emissions (PE) from the baghouse stack and any fugitive egress points shall be no more than 0.42 tpy. See b)(2)a.
b.	OAC rule 3745-17-11(B)	None [See b)(2)b.]
c.	OAC rule 3745-17-07(A)	None [See b)(2)c.]
d.	OAC rule 3745-17-07(B)	This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-08(B)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

(2) Additional Terms and Conditions

a. Permit-to-install P0104072 takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum control efficiency of 99%, by weight for PE, as a voluntary restriction as proposed by the

permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule3745-31-05(A)(3).

b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table I does not apply because the facility is located in Wayne County.

c. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

d. This emissions unit is operationally united with P002 (Snag Grinders), P904 (Auto Grinder), Hand Grinding, and Swing Grinders; and all these emissions units are controlled by a common baghouse.

e. PE emissions from P905 shall be vented to the baghouse serving the Swing Grinders, Hand Grinders, P002, and P904.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI P0104072 and OAC rule 3745-77-07(A)(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 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. The acceptable pressure drop shall be based upon the manufacturer’s specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 8.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 8.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI P0104072 and OAC rule 3745-77-07(A)(1)]

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0104072 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE from the baghouse stack and any fugitive egress points shall be no more than 0.42 tpy.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable PE limitation above using the following equation:

PE = [[EF x P x (Ca) x (1 - Co)] + [EF x P x (1 - Ca) x (1 - Bca)]] x 8,760 hrs/yr / 2,000 lbs/ton

where:

PE = maximum annual emission rate;

EF = emission factor (1.6 lbs/ton of iron from "An Inventory of Iron Foundry Emissions," by Bernard S. Gutow, Modern Casting, January 1972);

P = maximum hourly process weight rate, 4.5 tons per hour;

Ca = estimated fractional capture efficiency, 0.99;

Co = manufacturer's rated fractional control efficiency, 0.99; and

Bca = fractional building capture efficiency, 0.66 (this value is used for cleaning and finishing emissions only as derived from AP-42, Table 17.10-7.

[Authority for term: PTI P0104072 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

31. P906, Back Floor Shakeout & Manipulator

Operations, Property and/or Equipment Description:

Back Floor Shakeout & Manipulator

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) from the baghouse stack shall not exceed 0.21 lb/hr and 0.91 tpy. PE shall not exceed 0.010 grain per dry standard cubic foot of total exhaust gases. Fugitive PE shall not exceed 4.77 tpy. Visible PE from the baghouse stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Visible emissions of fugitive dust from any building egress point shall not exceed 5% opacity, as a 3-minute average. Volatile organic compound (VOC) emissions shall not exceed 9.60 lbs/hr and 35.74 tpy. Carbon monoxide (CO) emissions shall not exceed 6.80 lbs/hr and 29.78 tpy. See b)(2)a.
b.	OAC paragraph 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)	PE shall not exceed 4.30 lbs/hr. See b)(2)f and b)(2)g.
d.	OAC rule 3745-17-07(B)	See b)(2)h.
e.	OAC rule 3745-17-08(B)	See b)(2)i.
f.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average. See b)(2)g.

(2) Additional Terms and Conditions

a. 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 pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

b. 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.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than 10 tons/year.

c. The emissions from emissions units P021, P902 and P906, shall be vented to a baghouse when one or more of the emissions units are in operation.

d. This permit to install takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum control efficiency of 99%, by weight of PE.

e. No record keeping and/or monitoring are required for VOC or CO emission limits because the maximum uncontrolled emission rates of VOC and CO cannot exceed the specified limits.

f. In accordance with OAC rule 3745-17-11(A)(2)(b)(ii), Table I of OAC rule 3745-17-11 shall not apply to this emissions unit since the facility is located in Wayne County.

g. This emission limitation applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

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

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

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) 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 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. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the range of 2.0 to 6.0 inches of water column, 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. 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 of the pressure drop across the baghouse shall be 2.0 to 6.0 inches of water column, unless revisions are requested by the permittee and approved in writing by the Northeast District Office of the Ohio EPA. 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: PTI P0106997 and OAC rule 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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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 emission incident; and

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

[Authority for term: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

[Authority for term: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall inspect the baghouse monthly and record the following information:

a. the date and time of the inspection;

b. any portion of the cleaning system, conveying system or hoppers that was not operating properly; and

c. any corrective action(s) taken.

[Authority for term: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly reports identifying 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 range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;

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: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit quarterly reports identifying all months during which a baghouse inspection was not performed.

[Authority for term: PTI P0106997 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Visible PE from the baghouse stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

<u>Applicable Compliance Method</u>:

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

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Visible emissions of fugitive dust from any building egress point shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

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

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

PE from the baghouse stack shall not exceed 0.010 grain per dry standard cubic foot of total exhaust gases and 0.21 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the emissions testing and procedures specified in f)(2) of these terms and conditions.

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

PE from the baghouse stack shall not exceed 0.91 tpy.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

PE = (MAT) (EF) (CPE) (1-COE) (1 ton/2000 lbs)

where:

PE = particulate emissions from the baghouse in tpy;

MAT = maximum annual throughput (59,568 tons/year);

EF = emission factor (emission factor of 3.20 lbs/ton of metal poured from Fire 6.25, 3-04-003-31);

CPE = fractional capture efficiency (0.95); and

COE = fractional control efficiency (0.99).

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Fugitive PE shall not exceed 4.77 tpy.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

Fugitive PE= (MAT) (EF) (1-CPE) (1 ton/2000 lbs)

where:

PE = fugitive particulate emissions in tpy;

MAT = maximum annual throughput (59,568 tons/year);

EF = emission factor (emission factor of 3.20 lbs/ton of metal poured from Fire 6.25, 3-04-003-31); and

CPE = fractional capture efficiency (0.95).

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

VOC emissions shall not exceed 9.60 lbs/hr.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

VOC= (MHT) (EF)

where:

VOC = volatile organic compound emissions in lbs/hr;

MHT = maximum hourly throughput (8.0 tons/hour); and

EF = emission factor (emission factor of 1.20 lbs/ton of metal poured from Fire 6.25, 3-04-003-31).

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

VOC emissions shall not exceed 35.74 tpy.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

VOC= (MAT) (EF) (1 ton/2000 lbs)

where:

VOC = volatile organic compound emissions in tpy;

MAT = maximum annual throughput (59,568 tons/year); and

EF = emission factor (emission factor of 1.20 lbs/ton of metal poured from Fire 6.25, 3-04-003-31).

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

CO emissions shall not exceed 6.80 lbs/hr.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

CO = (MHT) (EF)

where:

CO = carbon monoxide emissions in lbs/hr;

MHT = maximum hourly throughput (6.8 tons/hour); and

EF = emission factor (emission factor of 1.00 lb/ton of metal poured from testing at a similar source at GM's Saginaw MI foundry).

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

i. Emission Limitation:

CO emissions shall not exceed 29.78 tpy.

Applicable Compliance Method:

Compliance with this limit shall be based on the following equation:

CO= (MAT) (EF) (1 ton/2000 lbs)

where:

CO = carbon monoxide emissions in tpy;

MAT = maximum annual throughput (59,568 tons/year); and

EF = emission factor (emission factor of 1.00 lb/ton of metal poured from testing at a similar source at GM's Saginaw MI foundry).

[Authority for term: PTI P0106997, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions and to determine the visible particulate emissions from the baghouse serving this emissions unit.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 5 and Method 9 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while this emissions unit and emissions units P021, P902 and P906, are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the

testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

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

g) Miscellaneous Requirements

(1) None.

32. Emissions Unit Group Exempt Units: F002, F003, F004, F005, F006, F022, P011 and P903

EU ID	Operations, Property and/or Equipment Description
F002	Scrap Reclaimer (vibrating mechanical separator used to remove metal from sand)
F003	Furnace #1 (coreless induction furnace 3750 KW)
F004	Furnace #2 (coreless induction furnace 3750 KW)
F005	Furnace #3 (coreless induction furnace 3750 KW)
F006	Roadways and Parking Areas
F022	Core Sand Receiving and Transfer (loading and unloading of sand for core making)
P011	Holding Furnaces #4 & #5 (2 furnaces – each 5 ton capacity used for "holding iron")
P903	Inliner Shakeout Sand Recycle System (sand system used to return sand from shakeout to recycle silos, previously identified as Z043)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.
b.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.
c.	40 CFR Part 63, Subpart ZZZZZ	F003, F004 and F005 are subject to this subpart.

(2) Additional Terms and Conditions

(a) P903 is operationally united with emissions unit P901 (Inliner shakeout) and is controlled by a common baghouse. The controls for emissions unit P903 were not employed until 1994 and there were no stack emissions prior to that time. Therefore, this emissions unit continues to be considered a fugitive dust source and OAC rules 3745-17-07(A) and 3745-17-11 are not applicable.

Particulate emissions from the belt transfer 7 to 8, belt transfer 8 to 8A, belt transfer 8A to rotary screen and the rotary screen shall continue to be vented to an air pollution control device.

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.

33. K001, Dip Paint Tank

Operations, Property and/or Equipment Description:

Dip tank casting paint 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 3745-31-05(A)(3)	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 11.25 pounds per hour and 22.5 tons per year.
b.	OAC rule 3745-31-05(D)	See b)(2)a and c)(2).
c.	OAC rule 3745-21-09(U)(1)(c)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The coatings applied in the coating operations shall not exceed 2.5 pounds of VOC per gallon of coating, excluding water and exempt solvents.

c) Operational Restrictions

(1) The dip tank shall be equipped with covers that shall be closed when the coating tank is not in use.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(A)(1)]

(2) The maximum annual coatings applied for this emissions unit shall not exceed 18,000 gallons, based upon a rolling, 12-month summation of the coatings applied.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee, having chosen to demonstrate compliance through the use of compliant coatings, shall collect and record the following information each month for the coating line and shall maintain this information at the facility for a period of three years:

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

b. the mass of VOC per volume (pounds/gallon) of each coating, excluding water and exempt solvents, as applied, calculated as follows for $C_{VOC,2}$:

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

where:

D_C = the density of coating, in pounds of coating per gallon of coating;

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

V_S = 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; and

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

This information does not have to be kept on a line-by-line basis, unless one or more of the lines or emissions units is subject to specific gallons/year and/or tons/year limitation in a Permit-to-install, where the above-mentioned information shall be maintained separately for each such 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: PTI P0106837 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall collect and record the following information on a monthlybasis for the coating and cleanup materials applied in this emissions unit:

a. the number of gallons of each coating applied or the number of gallons of all coatings applied during the month;

b. the maximum VOC content (excluding water and exempt solvents) of each coating applied; or the maximum VOC content (excluding water and exempt solvents) for any coating applied, in pounds per gallon, as calculated for $C_{VOC,2}$ above;

c. the total VOC emissions from all coatings applied, i.e., the summation of the products of "a" times "b" for all the individual coatings applied during the month; or the product of the maximum VOC content of any coating applied times the total gallons of coating employed during the day, i.e.,"a" times "b" for worst case coating;

d. the name and identification of each cleanup material employed;

e. the VOC content of each cleanup material, in pounds per gallon;

f. the number of gallons of each cleanup material employed;

g. the total VOC emission rate from all cleanup materials, in pounds or tons, i.e., the summation of the products of "e" times "f" for all cleanup materials employed;

h. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons, the sum of "c" and "g";

i. the number of operating hours; and

j. the average hourly VOC emissions from the coatings and cleanup materials.

These daily records shall be maintained for the purpose of determining annual VOC emissions for the emissions unit.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain a record of the coating usage on a 12-month basis, i.e., at the end of each month, the sum of the gallons of coating used during the month plus the gallons applied during the preceding 11 months of operation.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(C)(1)]

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

a. any exceedance of the coating usage restrictions and including the amount of coating usage recorded for each such rolling, 12-month period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: PTI P0106837 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

The VOC emissions from the dip tank shall not exceed 11.25 pounds of VOC per hour.

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2).

[Authority for term: PTI P0106837, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

b. <u>Emission Limitation</u>:

The VOC emissions from the dip tank shall not exceed 22.5 tons of VOC annually.

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2) and the summation of the monthly emissions rate during the calendar year.

[Authority for term: PTI P0106837, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The VOC content of the coatings applied in this emissions unit shall not exceed 2.5 pounds of VOC per gallon, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be demonstrated based upon specific coating formulation data and, if requested, U.S. EPA Method 24 analysis.

[Authority for term: PTI P0106837, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

The maximum annual coatings applied for this emissions unit shall not exceed 18,000 gallons, based upon a rolling, 12-month summation of the coatings applied.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(3).

[Authority for term: PTI P0106837, OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.