



State of Ohio Environmental Protection Agency

STREET ADDRESS:

MAILING ADDRESS:

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50 W. Town St., Suite 700
Columbus, Ohio 43215

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www.epa.ohio.gov

P.O. Box 1049
Columbus, OH 43216-1049

1/28/2010

Certified Mail

John Nicora
Elyria Foundry
120 Filbert Street
Elyria, OH 44036

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0247040014
Permit Number: P0104933
Permit Type: OAC Chapter 3745-31 Modification
County: Lorain

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Chronicle Telegram. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.ohio.gov> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

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

Cc: U.S. EPA
Ohio EPA-NEDO; Canada



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install
Permit Number: P0104933
Facility ID: 0247040014

Permit Strategy

Elyria Foundry (02-47-04-0014)

Application # A0037219 Permit # P0104933 (F023)

Elyria Foundry is re-permitting many of their older PTI's in an attempt to more accurately reflect the process weight rates that are required to run the foundry.

This permit is for a mixer located in #1 Foundry and its ancillary equipment. The facility wishes to have the permit issued draft to ensure federal enforceability on all limits.

Lorain County is attainment for particulates and ozone.

PUBLIC NOTICE
Issuance Of Draft Air Pollution Permit-To-Install
Elyria Foundry

Issue Date: 1/28/2010

Permit Number: P0104933

Permit Type: OAC Chapter 3745-31 Modification

Permit Description: Continuous Sand Mixer for Molds located in #1 Foundry also has a 60 ton sand bin (East Bin) and a 70 ton sand bin (West Bin) vented to a baghouse. Furan No-Bake is used.

Facility ID: 0247040014

Facility Location: Elyria Foundry
120 Filbert Street,
Elyria, OH 44036

Facility Description: Iron Foundries

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Erik Bewley at Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road or (330)425-9171. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

DRAFT

**Air Pollution Permit-to-Install
for
Elyria Foundry**

Facility ID: 0247040014
Permit Number: P0104933
Permit Type: OAC Chapter 3745-31 Modification
Issued: 1/28/2010
Effective: To be entered upon final issuance



Air Pollution Permit-to-Install
for
Elyria Foundry

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install
Permit Number: P0104933
Facility ID: 0247040014

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0247040014
Facility Description: Iron Foundry
Application Number(s): A0037219
Permit Number: P0104933
Permit Description: Continuous Sand Mixer for Molds located in #1 Foundry also has a 60 ton sand bin (East Bin) and a 70 ton sand bin (West Bin) vented to a baghouse. Furan No-Bake is used.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$1,250.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 1/28/2010
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Elyria Foundry
120 Filbert Street
Elyria, OH 44036

of a Permit-to-Install for the emissions unit(s) identified on the following page.

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

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

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install
Permit Number: P0104933
Facility ID: 0247040014

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0104933
Permit Description: Continuous Sand Mixer for Molds located in #1 Foundry also has a 60 ton sand bin (East Bin) and a 70 ton sand bin (West Bin) vented to a baghouse. Furan No-Bake is used.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	F023
Company Equipment ID:	#1 Foundry CE 2000 #/hr. Sand Mixer
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0104933

Facility ID: 0247040014

Effective Date: To be entered upon final issuance

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. 2.a), Severability Clause
 - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A. 9., Reporting Requirements
 - (5) Standard Term and Condition A. 10., Applicability
 - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A. 14., Public Disclosure
 - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A. 16., Fees
 - (10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying 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.

4. 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, 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.
- 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, 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.



(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) 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 ORC section 3704.08.
 - (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.
- d) 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio 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 (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted



(i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit 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) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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

16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0104933

Facility ID: 0247040014

Effective Date: To be entered upon final issuance

17. 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.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. 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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0104933

Facility ID: 0247040014

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0104933

Facility ID: 0247040014

Effective Date: To be entered upon final issuance

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: P0104933

Facility ID: 0247040014

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. F023, #1 Foundry CE 2000 #/hr. Sand Mixer

Operations, Property and/or Equipment Description:

Continuous Sand Mixer for Molds located in #1 Foundry also has a 60 ton sand bin (East Bin) and a 70 ton sand bin (West Bin) both bins are vented to a baghouse. Furan No-Bake is used.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(a) OAC rule 3745-31-05(E)	Particulate matter (PM) emissions from the baghouse shall not exceed 1.8 pounds per hour and 1.06 tons per year Particulate matter less than 10 microns (PM ₁₀) emissions from the baghouse shall not exceed 0.90 pound per hour and 0.53 ton per year. Fugitive PM emissions shall not exceed 0.65 ton per year. Fugitive PM ₁₀ emissions shall not exceed 0.33 ton per year. Organic compound (OC)/Volatile organic compound (VOC) emissions shall not exceed 38.0 pounds per day and 0.93 ton per year. See b)(2)a.
b.	OAC rule 3745-17-07(B)	See b)(2)c.
c.	OAC rule 3745-17-08(B)	See b)(2)d.
d.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(E).
e.	OAC rule 3745-21-07	OC emissions shall not exceed 8 pounds per hour and 40 pounds per day.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)b.
f.	OAC rule 3745-17-07(A)	Visible particulate emissions from the baghouse shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

(2) Additional Terms and Conditions

- a. This Permit to Install (PTI) for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment), as provided by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

The sand bin that serves this emissions unit shall be vented to a baghouse.

- b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008.
- c. 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).
- d. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) The amount of sand processed through this emissions unit shall not exceed 42,345 tons per year.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse that the bin is vented and 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 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.

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.

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

Whenever the monitored value for the pressure drop deviates from the range of 4.0 - 8.5 inches of water, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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



- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across the baghouse shall be 4.0 - 8.5 inches of water, 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 modification.

e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that identify:
 - a. all days during which any visible particulate emissions were observed from the baghouse that is serving this emissions unit;
 - b. 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
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive particulate emissions.

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

- (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.
- (3) The permittee shall submit annual deviation (excursion) reports that identify if the annual sand usage exceeded 42,345 tons.



f) Testing Requirements

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

a. Emission Limitation:

PM emissions from the baghouse shall not exceed 1.8 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E_{sh} = [(1.3/1.3) \times TPH \times (1 - FE)]$$

where:

E_{sh} = emissions from stack, pound per hour;

1.3 = emission factor from RACM page 2-219 for Mold Sand Preparation, pound of PM per ton of metal;

TPH = tons of sand processed through emissions unit, maximum capacity of 36 tons per hour;

FE = baghouse efficiency, assumed to be 95%, 0.95; and

1.3 = minimum sand to metal ratio, ton metal per ton sand.

b. Emission Limitation:

PM emissions from the baghouse shall not exceed 1.06 tons per year.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E_{sy} = [(1.3/1.3) \times TPY \times (1 - FE)]/2000$$

where:

E_{sy} = emissions from stack, ton per year;

1.3 = emission factor from RACM page 2-219 for Mold Sand Preparation, pound of PM per ton of metal;

TPY = tons of sand processed through emissions unit, maximum capacity of 42,345 tons per year;

FE = baghouse efficiency, assumed to be 95%, 0.95;

1.3 = minimum sand to metal ratio, ton metal per ton sand; and

2000 = conversion factor, pounds per ton.



c. Emission Limitation:

PM₁₀ emissions from the baghouse shall not exceed 0.90 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

PM₁₀ emissions are assumed to be 50% of PM emissions.

d. Emission Limitation:

Fugitive PM emissions shall not exceed 0.65 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E_f = [(0.04/1.3) \times \text{TPY}]/2000$$

where:

E_f = fugitive emissions, tons per year;

0.04 = emission factor from RACM page 2-219 for Mold Making, pound of PM per ton of metal;

1.3 = minimum sand to metal ratio, ton metal per ton sand;

TPY = tons of sand processed through emissions unit, maximum capacity of 42,345 tons per year; and

2000 = conversion factor, pounds per ton.

e. Emission Limitation:

Fugitive PM₁₀ emissions shall not exceed 0.33 ton per year.

Applicable Compliance Method:

Fugitive PM₁₀ emissions are assumed to be 50% of fugitive PM emissions.

f. Emission Limitation:

OC/VOC emissions shall not exceed 38.0 pounds per day.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E = \text{TPD} \times \text{EF}$$

where:

E = emissions of OC/VOC, pounds per day;



TPD = throughput of sand, in tons, maximum capacity of 864 tons per day; and

EF = emission factor provided by resin manufacturer, 0.044 lb OC/VOC per ton of sand.

g. Emission Limitation:

OC/VOC emissions shall not exceed 0.93 ton per year.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E = [TPY \times EF] / 2000$$

where:

E = emissions of OC/VOC, tons per year;

TPY = throughput of sand, in tons, maximum capacity of 42,345 tons per year;

EF = emission factor provided by resin manufacturer, 0.044 lb OC,VOC per ton of sand; and

2000 = conversion factor, pounds per ton.

h. Emission Limitation:

Visible particulate emissions from the baghouse shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

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

i. Emission Limitation:

OC emissions shall not exceed 8 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E = TPH \times EF$$

where:

E = emissions of organic compounds, pounds per hour;

TPH = throughput of sand, tons per hour, maximum capacity of 36 tons per hour; and



EF = emission factor provided by resin manufacturer, 0.044 lb OC,VOC per ton of sand.

j. Emission Limitation:

OC emissions shall not exceed 40 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E = TPD \times EF$$

where:

E = emissions of organic compounds, pounds per day;

TPD = throughput of sand, tons per day, maximum capacity of 864 tons per day;
and

EF = emission factor provided by resin manufacturer, 0.044 lb OC,VOC per ton of sand.

g) Miscellaneous Requirements

(1) None.