



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

7/13/2011

Mr. Ralph Stacy
O.S. KELLY COMPANY
318 EAST NORTH ST
SPRINGFIELD, OH 45503

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0812100276
Permit Number: P0107449
Permit Type: Renewal
County: Clark

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

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

If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: RAPCA



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
O.S. KELLY COMPANY**

Facility ID:	0812100276
Permit Number:	P0107449
Permit Type:	Renewal
Issued:	7/13/2011
Effective:	7/13/2011
Expiration:	1/28/2016



Division of Air Pollution Control
Permit-to-Install and Operate
for
O.S. KELLY COMPANY

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Authorization

Facility ID: 0812100276
Application Number(s): A0040974, A0041034, A0039702, A0041010, A0039670, A0039727, A0039710,
A0039633, A0040328, A0039722, A0040972, A0039724
Permit Number: P0107449
Permit Description: FEPTIO Renewal permit for synthetic minor emissions units at gray iron foundry.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 7/13/2011
Effective Date: 7/13/2011
Expiration Date: 1/28/2016
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

O.S. KELLY COMPANY
318 EAST NORTH ST
SPRINGFIELD, OH 45503

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

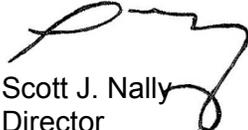
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0107449

Permit Description: FEPTIO Renewal permit for synthetic minor emissions units at gray iron foundry.

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

Emissions Unit ID:	F006
Company Equipment ID:	Number 3 Coreless Furnace
Superseded Permit Number:	08-1279
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F013
Company Equipment ID:	Herman Line - Pouring
Superseded Permit Number:	08-04462
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F014
Company Equipment ID:	Herman Line - Cooling
Superseded Permit Number:	08-04462
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F015
Company Equipment ID:	No Bake - Floor Mold Pouring
Superseded Permit Number:	P0091499
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F016
Company Equipment ID:	No Bake - Floor Mold Cooling
Superseded Permit Number:	P0091499
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F018
Company Equipment ID:	No Bake - Floor Mold Knockout
Superseded Permit Number:	P0091499
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P027
Company Equipment ID:	Palmer No Bake Mold Sand Mixer
Superseded Permit Number:	08-04462
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P029
Company Equipment ID:	No Bake - Mold Wash
Superseded Permit Number:	08-04462
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	Scrap and Charge Handling
Superseded Permit Number:	08-04462
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P902
Company Equipment ID:	No Bake Sand Reclamation System
Superseded Permit Number:	08-04462
General Permit Category and Type:	Not Applicable

Emissions Unit ID: **P903**
Company Equipment ID: Herman Line - Sand System
Superseded Permit Number: 08-04462
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P905**
Company Equipment ID: Foundry Shakeout
Superseded Permit Number: P0091499
General Permit Category and Type: Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Regional Air Pollution Control Agency in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.

C. Emissions Unit Terms and Conditions



1. F006, Number 3 Coreless Furnace

Operations, Property and/or Equipment Description:

Number 3 Coreless Furnace

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(2), e)(2) and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-1279 issued 7/29/87)	Particulate emissions (PE) shall not exceed 2.7 lbs/hr. See b)(2)a and b)(2)b.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	PE shall not exceed 9.9 tons per rolling, 12-month period.
c.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

- (2) Additional Terms and Conditions
 - a. Visible emissions from this emissions unit shall not exceed 5% opacity, as a six minute average, except during slagging at which time visible emissions may not exceed 10% opacity, as a six minute average, as observed from general ventilation egress points.
 - b. The 2.7 lbs/hour PE limit was established to reflect the potential to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- c) Operational Restrictions
 - (1) The annual metal production rate for this emissions unit shall not exceed 21,900 tons, based on a rolling 12-month summation.
- 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
 - (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the metal production, in tons;
 - b. the PE, in tons;
 - c. the rolling, 12-month metal production rate, in tons; and
 - d. the rolling, 12-month PE rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month metal production rate limitation; and
 - ii. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 2.7 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum capacity of the furnace (3 tons/hr) by the uncontrolled electric induction furnace emission factor (0.9 lb PE/ton, AP-42 Table 12.10-3 (1/95)).

If required, compliance can also be determined in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures specified in U.S. EPA Reference Methods 1 through 5 of 40 CFR Part 60, Appendix A.

b. Emissions Limitation:

PE shall not exceed 9.9 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for this emission unit for the 12-month period and multiplying this sum by the uncontrolled electric induction furnace emission factor (0.9 lb PE/ton, AP-42 Table 12.10-3 (1/95)), and dividing by 2000 lbs/ton.

c. Emissions Limitation:

Visible emissions from this emissions unit shall not exceed 5% opacity, as a six minute average, except during slagging at which time visible emissions may not exceed 10% opacity, as a six minute average, as observed from general ventilation egress points.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



2. F013, Herman Line - Pouring

Operations, Property and/or Equipment Description:

Herman Line - Pouring

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(2), e)(2) and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	Particulate emissions (PE) shall not exceed 28 lbs/day. Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08(B) and 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	PE shall not exceed 5.11 tons per rolling, 12-month period.
c.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The annual metal production rate for this emissions unit shall not exceed 3,650 tons, based on a rolling 12-month summation.

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

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

(2) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. the number of operating days;
- b. the metal production, in tons;
- c. the PE, in tons;
- d. the rolling, 12-month metal production rate, in tons; and
- e. the rolling, 12-month PE rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month metal production rate limitation; and
 - ii. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 28 lbs/day.

Applicable Compliance Method:

Compliance shall be determined by multiplying the monthly amount of metal poured, in tons, by the emission factor of 2.8 lbs PE/ton metal poured {4.2 lbs/ton (pouring and cooling, Web FIRE, SCC 3-04-003-20) minus 1.4 lbs/ton (cooling, AP-42 Table 12.10-7, 1/95)} and dividing by the number of operating days.

b. Emissions Limitation:

PE shall not exceed 5.11 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for this emission unit for the 12-month period and multiplying this sum by the emission factor of 2.8 lbs PE/ton metal poured {4.2 lbs/ton (pouring and cooling, Web FIRE, SCC 3-04-003-20) minus 1.4 lbs/ton (cooling, AP-42 Table 12.10-7, 1/95)}.

c. Emissions Limitation:

Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



3. F014, Herman Line - Cooling

Operations, Property and/or Equipment Description:

Herman Line - Cooling

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(2), e)(2) and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	Particulate emissions (PE) shall not exceed 14 lbs/day. Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08(B) and 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	PE shall not exceed 2.56 tons per rolling, 12-month period.
c.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The annual metal production rate for this emissions unit shall not exceed 3,650 tons, based on a rolling 12-month summation.

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

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

(2) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. the number of operating days;
- b. the metal production, in tons;
- c. the PE, in tons;
- d. the rolling, 12-month metal production rate, in tons; and
- e. the rolling, 12-month PE rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month metal production rate limitation; and
 - ii. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 14 lbs/day.

Applicable Compliance Method:

Compliance shall be determined by multiplying the monthly amount of metal poured, in tons, by the emission factor of 1.4 lbs PE/ton metal processed {Web FIRE, SCC 3-04-003-25 (10/01)} and dividing by the number of operating days.

b. Emissions Limitation:

PE shall not exceed 2.56 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for this emission unit for the 12-month period and multiplying this sum by the emission factor of 1.4 lbs PE/ton metal processed {Web FIRE, SCC 3-04-003-25 (10/01)}.

c. Emissions Limitation:

Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

4. F015, No Bake - Floor Mold Pouring

Operations, Property and/or Equipment Description:

No Bake - Floor Mold Pouring

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)a, c)(1), d)(2), e)(2), f)(1)a and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	Particulate emissions (PE) shall not exceed 5.1 tons per rolling 12-month period. Volatile organic compound (VOC) emissions shall not exceed 0.26 tons per rolling 12-month period.
b.	OAC rule 3745-17-07(B)	Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The annual metal production rate for this emissions unit shall not exceed 3,650 tons, based on a rolling 12-month summation.
- 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under d)(1)d above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

 - (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the metal production, in tons;
 - b. the PE and VOC emissions, in tons;
 - c. the rolling, 12-month metal production rate, in tons; and
 - d. the rolling, 12-month PE and VOC emissions rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month metal production rate limitation; and
 - ii. all exceedances of the rolling, 12-month PE and VOC emissions limitations.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 5.1 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for the 12-month period and multiplying this sum by the uncontrolled metal pouring emission factor (2.8 lbs PE/ton, 4.2 lbs/ton for pouring and cooling (AP-42 Table 12.10-7 (1/95)) minus 1.4 lbs/ton cooling (Web FIRE, SCC 3-04-003-25) equals 2.8 lbs/ton pouring only), and dividing by 2000 lbs/ton.

b. Emissions Limitation:

VOC emissions shall not exceed 0.26 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for the 12-month period and multiplying this sum by the uncontrolled metal pouring/casting emission factor (0.14 lbs VOC/ton, Web FIRE, SCC 3-04-003-20), and dividing by 2000 lbs/ton.

c. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



5. F016, No Bake - Floor Mold Cooling

Operations, Property and/or Equipment Description:

No Bake - Floor Mold Cooling

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a, c)(1), d)(2), e)(2) and f)(1)a.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	Particulate emissions (PE) shall not exceed 2.6 tons per rolling 12-month period.
b.	OAC rule 3745-17-07(B)	Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. None.

- c) Operational Restrictions
- (1) The annual metal production rate for this emissions unit shall not exceed 3,650 tons, based on a rolling 12-month summation.
- 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under d)(1)d above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the metal production, in tons;
 - b. the PE, in tons;
 - c. the rolling, 12-month metal production rate, in tons; and
 - d. the rolling, 12-month PE rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month metal production rate limitation; and
 - ii. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 2.6 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for the 12-month period and multiplying this sum by the uncontrolled metal cooling emission factor (1.4 lbs PE/ton, Web FIRE, SCC 3-04-003-25), and dividing by 2000 lbs/ton.

b. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



6. F018, No Bake - Floor Mold Knockout

Operations, Property and/or Equipment Description:

No Bake - Floor Mold Knockout

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a, c)(1), d)(2), e)(2) and f)(1)a.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	Particulate emissions (PE) shall not exceed 5.8 tons per rolling 12-month period.
b.	OAC rule 3745-17-07(B)	Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. None.

- c) Operational Restrictions
- (1) The annual metal production rate for this emissions unit shall not exceed 3,650 tons, based on a rolling 12-month summation.
- 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under d)(1)d above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the metal production, in tons;
 - b. the PE, in tons;
 - c. the rolling, 12-month metal production rate, in tons; and
 - d. the rolling, 12-month PE rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month metal production rate limitation; and
 - ii. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 5.8 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly metal production rates for the 12-month period and multiplying this sum by the uncontrolled shakeout emission factor (3.2 lbs PE/ton, AP-42 Table 12.10-7 (1/95)), and dividing by 2000 lbs/ton.

b. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



7. P027, Palmer No Bake Mold Sand Mixer

Operations, Property and/or Equipment Description:

Palmer No Bake Mold Sand Mixer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b, c)(1), d)(1), e)(1) and f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	<p>Volatile organic compound (VOC) shall not exceed 117 lbs/day.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	VOC emissions shall not exceed 21.35 tons per rolling 12-month period.

(2) Additional Terms and Conditions

a. None.

- c) Operational Restrictions
 - (1) The annual quantity of sand handled shall not exceed 36,500 tons, based on a rolling 12-month summation.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the number of operating days;
 - b. the quantity of sand handled, in tons;
 - c. the VOC emissions, in tons;
 - d. the rolling, 12-month quantity of sand handled, in tons; and
 - e. the rolling, 12-month VOC emissions rate, in tons.
- e) Reporting Requirements
 - (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month quantity of sand handled limitation; and
 - ii. all exceedances of the rolling, 12-month VOC emissions limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

VOC shall not exceed 117 lbs/day.

Applicable Compliance Method:

Compliance shall be determined by multiplying the monthly quantity of sand handled for the 12-month period and multiplying this sum by the emission factor of 1.17 lbs OC/ton sand handled (1998 EPA and OCMA guidance document) and dividing by the number of operating days.

- b. Emissions Limitation:

VOC emissions shall not exceed 21.35 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly quantities of sand handled for the 12-month period and multiplying this sum by the emission factor of 1.17 lbs OC/ton sand handled (1998 EPA and OCMA guidance document).

g) Miscellaneous Requirements

- (1) None.



8. P029, No Bake - Mold Wash

Operations, Property and/or Equipment Description:

No Bake - Mold Wash

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(1), e)(1) and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	<p>Volatile organic compound (VOC) shall not exceed 57.6 lbs/day.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	<p>VOC emissions shall not exceed 10.51 tons per rolling 12-month period.</p> <p>Individual and combined hazardous air pollutant (HAP) emissions shall not exceed 3.5 tons per rolling 12-month period.</p>

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The annual quantity of mold wash used shall not exceed 14,600 gallons, based on a rolling 12-month summation.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the company identification for each mold wash material employed;
 - b. the number of gallons of each mold wash material employed;
 - c. the VOC, individual HAP and combined HAP contents of each mold wash material, in pounds per gallon;
 - d. the total VOC, individual HAP and combined HAP emission rates for all mold wash materials, in pounds per month;
 - e. the total number of days the emissions unit was in operation;
 - f. the average daily VOC emission rate for all mold wash material, i.e., $d)(1)d / d)(1)e$, in pounds per day (average);
 - g. the VOC, individual HAP and combined HAP emissions, in tons;
 - h. the rolling, 12-month quantity of mold wash used, in gallons; and
 - i. the rolling, 12-month VOC, individual HAP and combined HAP emissions rates, in tons.
- e) Reporting Requirements
 - (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month mold wash usage quantity limitation; and
 - ii. all exceedances of the rolling, 12-month VOC, individual HAP and combined HAP emissions limitations.

- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

VOC shall not exceed 57.6 lbs/day.

- Applicable Compliance Method:

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

- b. Emissions Limitation:

VOC emissions shall not exceed 10.51 tons per rolling 12-month period.

- Applicable Compliance Method:

Compliance shall be determined by summing the monthly VOC emission calculations for the 12-month period and dividing by 2000 lbs/ton.

- c. Emissions Limitation:

Individual and combined HAP emissions shall not exceed 3.5 tons per rolling 12-month period.



Applicable Compliance Method:

Compliance shall be determined by summing the monthly individual and combined HAP emission calculations for the 12-month period and dividing by 2000 lbs/ton.

g) Miscellaneous Requirements

- (1) None.



9. P901, Scrap and Charge Handling

Operations, Property and/or Equipment Description:

Scrap and Charge Handling

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(2), e)(2) and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	Particulate emissions (PE) shall not exceed 36 lbs/day. Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08(B) and 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	PE shall not exceed 6.57 tons per rolling, 12-month period.
c.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The annual quantity of metal charged for this emissions unit shall not exceed 21,900 tons, based on a rolling 12-month summation.

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

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

(2) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. the number of operating days;
- b. the quantity of metal charged, in tons;
- c. the PE, in tons;
- d. the rolling, 12-month quantity of metal charged, in tons; and
- e. the rolling, 12-month PE rate, in tons.

e) Reporting Requirements

- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month quantity of metal charged limitation; and
 - ii. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 36 lbs/day.

Applicable Compliance Method:

Compliance shall be determined by multiplying the monthly quantity of metal charged, in tons, by the emission factor of 0.60 lbs PE/ton metal charged {Web FIRE, SCC 3-04-003-15 (10/01)} and dividing by the number of operating days.

b. Emissions Limitation:

PE shall not exceed 6.57 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly quantity of metal charged for the 12-month period and multiplying this sum by the emission factor of 0.60 lbs PE/ton metal charged {Web FIRE, SCC 3-04-003-15 (10/01)}.

c. Emissions Limitation:

Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



10. P902, No Bake Sand Reclamation System

Operations, Property and/or Equipment Description:

No Bake Sand Reclamation System

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(5), e)(2)a.iii, e)(2)a.iv and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	Particulate emissions (PE) shall not exceed 0.98 lb/hr. Visible PE from the stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	PE shall not exceed 4.26 tons per rolling 12-month period.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A), OAC rule 3745-17-07(B), and OAC rule 3745-17-11(B)	The emission limitations specified by these rules are less stringent than that established by OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. The particulate emissions from emissions units P902, P903 and P905 are controlled through the application of a common fabric filter, the Foundry Baghouse. The emissions from this emissions unit shall be vented to the Foundry Baghouse at all times the emissions unit is in operation.

c) Operational Restrictions

(1) The annual quantity of sand handled shall not exceed 292,000 tons, based on a rolling 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.5 to 7.0 inches of water.

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

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;

- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

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

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

This range on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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 will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
- (5) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the quantity of sand handled, in tons;
 - b. the PE, in tons;
 - c. the rolling, 12-month quantity of sand handled, in tons; and
 - d. the rolling, 12-month PE rate, in tons.
- e) Reporting Requirements
- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
- a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - ii. 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;
 - iii. all exceedances of the rolling, 12-month quantity of sand handled limitation; and
 - iv. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);

- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 0.98 lb/hr.

- Applicable Compliance Method:

Compliance shall be determined as follows:

- i. For sand dump emissions, the maximum hourly process rate of 5.0 tons sand/hour is multiplied by the emissions factor, 0.0415 lb PE/ton, {AP-42, Section 13.2.4, Equation 1 (10/01)}, resulting in an emission rate of 0.208 lb/hr.
- ii. For Attrition Mill emissions, the maximum hourly process rate of 5.0 tons sand/hour is multiplied by the emission factor, 0.015 lb PE/ton {AP-42, Chapter 11, Table 11.19.2-2, (01/95)} and by a control factor of 97%, i.e., (1 - 0.97), resulting in a controlled emission rate of 0.002 lb/hour.
- iii. For bucket elevator to vibrating screen emissions, the maximum hourly process rate of 5.0 tons/hour is multiplied by the emission factor, 0.24 lb PE/ton {AP-42, Chapter 11, Table 11.12-2 (01/95)} and by a control factor of 97%, i.e.,(1 - 0.97), resulting in a controlled emission rate of 0.036 lb/hr.

- iv. For vibrating screen emissions, the maximum hourly process rate of 5.0 tons sand/hour is multiplied by the emissions factor, 0.071 lb PE/ton, {AP-42, Chapter 11, Table 11.19-2-2 (01/95)}, resulting in an emission rate of 0.355 lb/hr.
- v. For Classifier emissions, the maximum hourly process rate of 5.0 tons/hour is multiplied by the emission factor, 2.00 lb PE/ton {AP-42, Chapter 11, Table 11.19.1-1 (01/95)} and by a control factor of 97%, i.e., (1 - 0.97), resulting in a controlled emission rate of 0.30 lb/hr.
- vi. For bucket elevator to surge hopper emissions, the maximum hourly process rate of 5.0 tons sand/hour is multiplied by the emissions factor, 0.24 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (01/95)} and by a control factor of 94%, i.e., (1 - 0.94), resulting in a controlled emission rate of 0.071 lb/hr.
- vii. $\text{sum } f(1)a.i + f(1)a.ii + f(1)a.iii + f(1)a.iv + f(1)a.v + f(1)a.vi$

b. Emissions Limitation:

PE shall not exceed 4.26 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined as follows:

- i. For sand dump emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emissions factor, 0.0415 lb PE/ton, {AP-42, Section 13.2.4, Equation 1 (10/01)}. Then, divide this product by 2,000 lbs/ton.
- ii. For Attrition Mill emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission factor, 0.015 lb PE/ton {AP-42, Chapter 11, Table 11.19.2-2, (01/95)} and by a control factor of 97%, i.e., (1 - 0.97). Then, divide this product by 2,000 lbs/ton.
- iii. For bucket elevator to vibrating screen emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission factor, 0.24 lb PE/ton {AP-42, Chapter 11, Table 11.12-2 (01/95)} and by a control factor of 97%, i.e., (1 - 0.97). Then, divide this product by 2,000 lbs/ton.
- iv. For vibrating screen emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emissions factor, 0.071 lb PE/ton, {AP-42, Chapter 11, Table 11.19-2-2 (01/95)}. Then, divide this product by 2,000 lbs/ton.
- v. For Classifier emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission

factor, 2.00 lb PE/ton {AP-42, Chapter 11, Table 11.19.1-1 (01/95)} and by a control factor of 97%, i.e., (1 - 0.97). Then, divide this product by 2,000 lbs/ton.

vi. For bucket elevator to surge hopper emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emissions factor, 0.24 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (01/95)} and by a control factor of 94%, i.e., (1 - 0.94). Then, divide this product by 2,000 lbs/ton.

vii. $\text{sum } f(1)b.i + f(1) b.ii + f(1)b.iii + f(1)b.iv + f(1)b.v + f(1)b.vi$

c. Emissions Limitation:

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

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

d. Emissions Limitation:

Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



11. P903, Herman Line - Sand System

Operations, Property and/or Equipment Description:

Herman Line - Sand System

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, c)(1), d)(5), e)(2)a.iii, e)(2)a.iv and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 08-04462 issued 8/14/03)	Particulate emissions (PE) shall not exceed 3.4 lbs/hr. Visible PE from the stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	PE shall not exceed 9.15 tons per rolling 12-month period.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A), OAC rule 3745-17-07(B), and OAC rule 3745-17-11(B)	The emission limitations specified by these rules are less stringent than that established by OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

(2) Additional Terms and Conditions

a. The particulate emissions from emissions units P902, P903 and P905 are controlled through the application of a common fabric filter, the Foundry Baghouse. The emissions from this emissions unit shall be vented to the Foundry Baghouse at all times the emissions unit is in operation.

c) Operational Restrictions

(1) The annual quantity of sand handled shall not exceed 292,000 tons, based on a rolling 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.5 to 7.0 inches of water.

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

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;

- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

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

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

This range on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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 will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
- (5) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the quantity of sand handled, in tons;
 - b. the PE, in tons;
 - c. the rolling, 12-month quantity of sand handled, in tons; and
 - d. the rolling, 12-month PE rate, in tons.
- e) Reporting Requirements
- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
- a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - ii. 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;
 - iii. all exceedances of the rolling, 12-month quantity of sand handled limitation; and
 - iv. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 3.4 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined as follows:

- i. For return sand conveyor to rotary screen emissions, the maximum hourly process rate of 54.0 tons sand/hour is multiplied by the emissions factor, 0.0021 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (10/01)}, resulting in an emission rate of 0.11 lb/hr.
- ii. For Rotary screen emissions, the maximum hourly process rate of 54.0 tons sand/hour is multiplied by the emission factor, 0.015 lb PE/ton {AP-42, Chapter 11, Table 11.19.2-2 (01/95)}, resulting in an emission rate of 0.81 lb/hr.
- iii. For return sand bucket and sand silo emissions, the maximum hourly process rate of 54.0 tons/hour is multiplied by the emission factor, 0.24 lb PE/ton {AP-42, Chapter 11, Table 11.12-2 (01/95)} and by a control factor of 94%, i.e., (1 - 0.94), resulting in a controlled emission rate of 0.78 lb/hr.
- iv. For return sand conveyor to muller mixer emissions, the maximum hourly process rate of 54.0 tons sand/hour is multiplied by the emissions factor, 0.0021 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (10/01)}, resulting in an emission rate of 0.11 lb/hr.

- v. For Muller mixer emissions, the maximum hourly process rate of 54.0 tons/hour is multiplied by the emission factor, 0.022 lb PE/ton {AP-42, Chapter 11, Table 11.12-2 (10/01)}, resulting in an emission rate of 1.19 lb/hr.
- vi. For reclaim sand conveyor and reclaim sand silo emissions, the maximum hourly process rate of 54.0 tons sand/hour is multiplied by the emissions factor, 0.0021 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (10/01)}, resulting in an emission rate of 0.11 lb/hr.
- vii. For Mold machine emissions, the maximum hourly amount of sand handled of 54.0 tons/hour is multiplied by the emission factor, 0.0055 lb PE/ton {AP-42, Chapter 12, Table 12.10-7 (01/95) with 20:1 sand to metal ratio adjustment i.e., 1.1 lbs/ton / 20}, resulting in an emission rate of 0.30 lb/hr.
- viii. $\text{sum } f(1)a.i + f(1)a.ii + f(1)a.iii + f(1)a.iv + f(1)a.v + f(1)a.vi + f(1)a.vii$

b. Emissions Limitation:

PE shall not exceed 9.15 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined as follows:

- i. For return sand conveyor to rotary screen emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emissions factor, 0.0021 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (10/01)}. Then, divide this product by 2,000 lbs/ton.
- ii. For Rotary screen emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission factor, 0.015 lb PE/ton {AP-42, Chapter 11, Table 11.19.2-2 (01/95)}. Then, divide this product by 2,000 lbs/ton.
- iii. For return sand bucket and sand silo emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission factor, 0.24 lb PE/ton {AP-42, Chapter 11, Table 11.12-2 (01/95)} and by a control factor of 94%, i.e., (1 - 0.06). Then, divide this product by 2,000 lbs/ton.
- iv. For return sand conveyor to muller mixer emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emissions factor, 0.0021 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (10/01)}. Then, divide this product by 2,000 lbs/ton.
- v. For Muller mixer emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission

factor, 0.022 lb PE/ton {AP-42, Chapter 11, Table 11.12-2 (10/01)}. Then, divide this product by 2,000 lbs/ton.

- vi. For reclaim sand conveyor and reclaim sand silo emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emissions factor, 0.0021 lb PE/ton, {AP-42, Chapter 11, Table 11.12-2 (10/01)}. Then, divide this product by 2,000 lbs/ton.
- vii. For Mold machine emissions, sum the monthly quantities of sand handled, in tons, for the 12-month period and multiply this sum by the emission factor, 0.0055 lb PE/ton {AP-42, Chapter 12, Table 12.10-7 (01/95) with 20:1 sand to metal ratio adjustment i.e., 1.1 lbs/ton / 20}. Then, divide this product by 2,000 lbs/ton.
- viii. $\text{sum } f(1)b.i + f(1)b.ii + f(1)b.iii + f(1)b.iv + f(1)b.v + f(1)b.vi + f(1)b.vii$

c. Emissions Limitation:

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

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

d. Emissions Limitation:

Fugitive visible PE shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) None.



12. P905, Foundry Shakeout

Operations, Property and/or Equipment Description:

Foundry Shakeout

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)a, c)(1), d)(5), e)(2) and f)(1)a.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V permitting)	Particulate emissions (PE) shall not exceed 0.80 tons per rolling 12-month period.
b.	OAC rule 3745-17-11(B)	PE from the stack serving this emissions unit shall not exceed 2.88 lbs/hr.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-17-07(B)	Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.
e.	OAC rule 3745-17-08(B)	Adequately enclose and contain fugitive dust to minimize or eliminate visible PE, to the extent possible with good engineering judgment.

- (2) Additional Terms and Conditions
- a. The particulate emissions from emissions units P902, P903 and P905 are controlled through the application of a common fabric filter, the Foundry Baghouse. The emissions from this emissions unit shall be vented to the Foundry Baghouse at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) The annual metal production rate for this emissions unit shall not exceed 3,650 tons, based on a rolling 12-month summation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.5 to 7.0 inches of water.
- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (3) Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date corrective action was completed;

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

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

This range on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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 will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under d)(1)d above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (5) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the metal production, in tons;
 - b. the PE, in tons;
 - c. the rolling, 12-month metal production rate, in tons; and
 - d. the rolling, 12-month PE rate, in tons.
- e) Reporting Requirements
- (1) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(1) above:
- a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - ii. 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;
 - iii. all exceedances of the rolling, 12-month metal production rate limitation; and
 - iv. all exceedances of the rolling, 12-month PE limitation.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

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. Emissions Limitation:

PE shall not exceed 0.80 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined as follows:

- i. For cope and drag separation and casting removal stack emissions, sum the monthly metal production rates, in tons, for the 12-month period and multiply this sum by the emission factor of 1.2 lbs PE/ton metal produced (OEPA RACM, Table 2.7-1, Casting Shakeout) and by a control factor of $((80 / 100) * ((100 - 99) / 100))$ where 80 is the baghouse capture efficiency (%) and 99 is the control efficiency of the baghouse. Then, divide this product by 2,000 lbs/ton.
- ii. For cope and drag separation and casting removal fugitive emissions, sum the monthly metal production rates, in tons, for the 12-month period and multiply this sum by the emission factor of 1.2 lbs PE/ton metal produced (OEPA RACM, Table 2.7-1, Casting Shakeout) and by a control factor of $((100 - 80) / 100)$ where 80 is the baghouse capture efficiency (%). Then, divide this product by 2,000 lbs/ton.
- iii. For shakeout stack emissions, sum the monthly metal production rates, in tons, for the 12-month period and multiply this sum by the emission factor of 3.2 lbs PE/ton metal produced (AP-42 Table 12.10-7 (1/95)) and by a control factor of $((95 / 100) * ((100 - 99) / 100))$ where 95 is the baghouse capture efficiency (%) and 99 is the control efficiency of the baghouse. Then, divide this product by 2,000 lbs/ton.
- iv. For shakeout fugitive emissions, sum the monthly metal production rates, in tons, for the 12-month period and multiply this sum by the emission

factor of 3.2 lbs PE/ton metal produced (AP-42 Table 12.10-7 (1/95)) and by a control factor of $((100 - 95) / 100)$ where 95 is the baghouse capture efficiency (%). Then, divide this product by 2,000 lbs/ton.

v. $\text{sum } f(1)\text{a.i} + f(1)\text{a.ii} + f(1)\text{a.iii} + f(1)\text{a.iv}$

b. Emissions Limitation:

PE from the stack serving this emissions unit shall not exceed 2.88 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined as follows:

i. For cope and drag separation and casting removal stack emissions, multiply the maximum capacity of the process (3 tons/hr) by the emission factor of 1.2 lbs PE/ton metal produced (OEPA RACM, Table 2.7-1, Casting Shakeout) and by a control factor of $((80 / 100) * ((100 - 99) / 100))$ where 80 is the baghouse capture efficiency (%) and 99 is the control efficiency of the baghouse.

ii. For shakeout stack emissions, multiply the maximum capacity of the process (3 tons/hr) by the emission factor of 3.2 lbs PE/ton metal produced (AP-42 Table 12.10-7 (1/95)) and by a control factor of $((95 / 100) * ((100 - 99) / 100))$ where 95 is the baghouse capture efficiency (%) and 99 is the control efficiency of the baghouse.

iii. $\text{sum } f(1)\text{b.i} + f(1)\text{b.ii}$

c. Emissions Limitation:

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

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

d. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

- g) Miscellaneous Requirements
 - (1) None.