



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

10/10/2013

JOHN HRIBAR  
WHEMCO - OHIO FOUNDRY INC  
1600 MCCLAIN RD  
LIMA, OH 45804

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0302020023  
Permit Number: P0111325  
Permit Type: Initial Installation  
County: Allen

Certified Mail

No	TOXIC REVIEW
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
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 Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

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

**How to appeal this permit**

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

Environmental Review Appeals Commission  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
WHEMCO - OHIO FOUNDRY INC**

Facility ID:	0302020023
Permit Number:	P0111325
Permit Type:	Initial Installation
Issued:	10/10/2013
Effective:	10/10/2013
Expiration:	10/10/2018





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
WHEMCO - OHIO FOUNDRY INC

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**Final Permit-to-Install and Operate**  
WHEMCO - OHIO FOUNDRY INC  
**Permit Number:** P0111325  
**Facility ID:** 0302020023  
**Effective Date:** 10/10/2013

## Authorization

Facility ID: 0302020023  
Application Number(s): A0045679, A0046581  
Permit Number: P0111325  
Permit Description: FEPTIO to establish particulate emissions limitations (both stack and fugitive) less than 100 tons/yr to avoid Title V permit requirements.  
Permit Type: Initial Installation  
Permit Fee: \$3,500.00  
Issue Date: 10/10/2013  
Effective Date: 10/10/2013  
Expiration Date: 10/10/2018  
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

WHEMCO - OHIO FOUNDRY INC  
1600 MCCLAIN RD  
LIMA, OH 45804

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

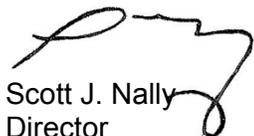
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

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: P0111325  
 Permit Description: FEPTIO to establish particulate emissions limitations (both stack and fugitive) less than 100 tons/yr to avoid Title V permit requirements.

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

- |                                   |                           |
|-----------------------------------|---------------------------|
| <b>Emissions Unit ID:</b>         | <b>F001</b>               |
| Company Equipment ID:             | Scrap and Charge Handling |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |
| <b>Emissions Unit ID:</b>         | <b>F002</b>               |
| Company Equipment ID:             | Pouring/Casting/Cooling   |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |
| <b>Emissions Unit ID:</b>         | <b>F030</b>               |
| Company Equipment ID:             | Sand Knockout             |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |
| <b>Emissions Unit ID:</b>         | <b>P901</b>               |
| Company Equipment ID:             | Sand Preparation System   |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |
| <b>Emissions Unit ID:</b>         | <b>P902</b>               |
| Company Equipment ID:             | Magnesium Treatment       |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |

**Group Name: Coreless Induction Furnaces**

<b>Emissions Unit ID:</b>	<b>F011</b>
Company Equipment ID:	Coreless induction furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F012</b>
Company Equipment ID:	Coreless Induction Furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F013</b>
Company Equipment ID:	Coreless Induction Furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F014</b>
Company Equipment ID:	Coreless Induction Furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F015</b>
Company Equipment ID:	Coreless Induction Furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
WHEMCO - OHIO FOUNDRY INC  
**Permit Number:** P0111325  
**Facility ID:** 0302020023  
**Effective Date:** 10/10/2013

## **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 Ohio EPA DAPC, Northwest District Office 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 submitting<sup>1</sup> 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.

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<sup>1</sup> Permittees 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.



**Final Permit-to-Install and Operate**  
WHEMCO - OHIO FOUNDRY INC  
**Permit Number:** P0111325  
**Facility ID:** 0302020023  
**Effective Date:** 10/10/2013

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



**Final Permit-to-Install and Operate**  
WHEMCO - OHIO FOUNDRY INC  
**Permit Number:** P0111325  
**Facility ID:** 0302020023  
**Effective Date:** 10/10/2013

## **C. Emissions Unit Terms and Conditions**



**1. F001, 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)a., b)(2)a., c)(1), d)(1), d)(2), e)(1), 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)	0.004 ton of fugitive particulate matter less than or equal to 10 micron diameter (PM <sub>10</sub> )/rolling, 12-month period  Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from scrap and charge handling storage piles serving this emissions unit  See b)(2)a.
b.	OAC rule 3745-17-07(B)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and Prevention



of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):

- i. 0.004 ton of fugitive PM<sub>10</sub>/rolling, 12-month period; and
  - ii. Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from scrap and charge handling storage piles serving this emissions unit.
- b. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
  - c. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-07(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)a.):

- a. The maximum annual production rate shall not exceed 56,000 tons of scrap metal handled, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	11,200
1-2	22,400
1-3	33,600
1-4	56,000
1-5	56,000
1-6	56,000
1-7	56,000
1-8	56,000
1-9	56,000



Month                      Maximum Allowable Cumulative Production (Tons)

1-10	56,000
1-11	56,000
1-12	56,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

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

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

- a. the production rate, in tons of scrap metal handled, for each month; and
- b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

(2) 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 scrap and charge handling storage piles serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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.

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 production rate limitation; and
    - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels.
  - 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 e-Business 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.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) 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.
- f) Testing Requirements
  - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

0.004 ton of fugitive PM<sub>10</sub>/rolling, 12-month period

Applicable Compliance Method:

The rolling, 12-month period emission limitation was determined by multiplying the maximum scrap metal handled of 56,000 tons/rolling, 12-month period by an emission factor of 0.00015 lb/ton of scrap metal handled from AP-42, Table 12.5-4, then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated.
    - b. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from scrap and charge handling storage piles serving this emissions unit

Applicable Compliance Method:

If required, compliance with the visible fugitive particulate emissions limitation shall be demonstrated in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
- g) Miscellaneous Requirements
  - (1) None.



**2. F002, Pouring/Casting/Cooling**

**Operations, Property and/or Equipment Description:**

Molten steel is poured into steel or sand molds and allowed to harden and cool.

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., b)(2)a., c)(1), d)(1), d)(2), e)(1), 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)	57.68 tons of fugitive particulate matter less than or equal to 10 microns in diameter (PM <sub>10</sub> )/rolling, 12-month period  Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units.  See b)(2)a.
b.	OAC rule 3745-17-07(B)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and Prevention



of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):

- i. 57.68 tons of fugitive PM<sub>10</sub>/rolling, 12-month period; and
  - ii. Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units.
- b. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
  - c. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-07(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)a.]:

- a. The maximum annual production rate shall not exceed 56,000 tons of metal poured, casted and cooled, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	11,200
1-2	22,400
1-3	33,600
1-4	56,000
1-5	56,000
1-6	56,000
1-7	56,000
1-8	56,000
1-9	56,000



<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1-10	56,000
1-11	56,000
1-12	56,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

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

- (1) The permittee shall maintain monthly records of the following information:
  - a. the production rate, in tons of metal poured, casted and cooled, for each month; and
  - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

- (2) The permittee shall perform daily checks, when the emissions units are 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 these emissions units. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. The location and color of the emissions;
  - b. Whether the emissions are representative of normal operations;
  - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. The total duration of any visible emission incident; and
  - e. Any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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.

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 production rate limitation; and
    - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels.
  - 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 e-Business 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.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) 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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

57.68 tons of fugitive PM<sub>10</sub>/rolling, 12-month period from pouring, casting and cooling

Applicable Compliance Method:

The rolling, 12-month period emission limitation was determined by multiplying the maximum metal pouring, casting and cooling rate of 56,000 tons/rolling, 12-month period by an emission factor of 2.06 lb PM<sub>10</sub>/ton metal from AP-42, Table 12.10-9 (1/95), then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated.
    - b. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units.

Applicable Compliance Method:

If required, compliance with the visible fugitive particulate emissions limitation shall be demonstrated in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
- g) Miscellaneous Requirements
- (1) None.



**3. Emissions Unit Group - Induction Furnaces: F011, F012, F013, F014, F015**

EU ID	Operations, Property and/or Equipment Description
F011	#2 Coreless Induction Melt Furnace with a capacity of 4.5 tons of scrap charged per hour
F012	#3 Coreless Induction Melt Furnace with a capacity of 4.5 tons of scrap charged per hour
F013	#4 Coreless Induction Melt Furnace with a capacity of 4.5 tons of scrap charged per hour
F014	#5 Coreless Induction Melt Furnace with a capacity of 4.5 tons of scrap charged per hour
F015	#6 Coreless Induction Melt Furnace with a capacity of 4.5 tons of scrap charged per hour

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., b)(2)a., c)(1), d)(1), d)(2), e)(1), 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)	22.40 tons of fugitive particulate matter less than or equal to 10 microns in diameter (PM <sub>10</sub> )/rolling, 12-month period from charging, melting and tapping for emissions unit F011 through F015, combined  Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units.  See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	See b)(2)c.



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

(2) Additional Terms and Conditions

- a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
  - i. 22.40 tons of fugitive PM<sub>10</sub>/rolling, 12-month period from charging, melting and tapping for emissions unit F011 through F015, combined; and
  - ii. Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units.
- b. All particulate emissions are assumed to be PM10.
- c. The Best Available Technology (BAT) requirements for this emission unit have been determined to be compliance with OAC rule 3745-31-05(D) and compliance with the terms and conditions of this permit.
- d. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-07(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)a.):

- a. The maximum annual production rate for emissions units F011 through F015, combined, shall not exceed 56,000 tons of scrap melted, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:



<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	11,200
1-2	22,400
1-3	33,600
1-4	56,000
1-5	56,000
1-6	56,000
1-7	56,000
1-8	56,000
1-9	56,000
1-10	56,000
1-11	56,000
1-12	56,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

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

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

- a. the production rate, in tons of scrap melted, for each month; and
- b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

(2) The permittee shall perform daily checks, when the emissions units are 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 these emissions units. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:



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

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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.

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 production rate limitation; and
    - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels.
  - 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 e-Business 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.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) 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.

f) Testing Requirements

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

22.40 tons of fugitive PM<sub>10</sub>/rolling, 12-month period from charging, melting and tapping for emissions unit F011 through F015, combined

Applicable Compliance Method:

The rolling, 12-month period emission limitation was determined by multiplying the maximum metal melt rate of 56,000 tons/rolling, 12-month period by an emission factor of 0.8 lb PM<sub>10</sub>/ton metal melted from AP-42, Table 12.10-3 (1/95), then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated.
  - b. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity, as a 3-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units.

Applicable Compliance Method:

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



**Final Permit-to-Install and Operate**  
WHEMCO - OHIO FOUNDRY INC  
**Permit Number:** P0111325  
**Facility ID:** 0302020023  
**Effective Date:** 10/10/2013

g) Miscellaneous Requirements

- (1) None.



**3. F030, Sand Knockout and Sand Handling**

**Operations, Property and/or Equipment Description:**

Sand knockout and sand 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)a., b)(2)a., c)(1), d)(1), d)(2), e)(1), 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)	2.16 tons of fugitive particulate matter less than or equal to 10 microns in diameter (PM <sub>10</sub> )/rolling, 12-month period  Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)d.
d.	OAC rule 3745-17-07(B)	See b)(2)e.
e.	OAC rule 3745-17-08(B)	See b)(2)f.



(2) Additional Terms and Conditions

- a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
  - i. 2.16 tons of fugitive PM<sub>10</sub>/rolling, 12-month period; and
  - ii. Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit.
- b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 have been determined to be compliance with OAC rule 3745-31-05(D) and compliance with the terms and conditions of this permit.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than 10 tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits and control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of PM<sub>10</sub> since the potential to emit is less than 10 tons per year, taking into account the federally enforceable restrictions established under OAC rule 3745-31-05(D) in this permit.
- e. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- f. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).



c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)a.):

a. The maximum annual production rate for this emissions unit shall not exceed 8,000 tons of sand handled, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	1,600
1-2	3,200
1-3	4,800
1-4	8,000
1-5	8,000
1-6	8,000
1-7	8,000
1-8	8,000
1-9	8,000
1-10	8,000
1-11	8,000
1-12	8,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

[Note: The maximum sand throughput is based upon the limited building space associated with the foundry floor. The inherent building space restrictions associated with the facility restricts the amount of cores and molds that can be made restricting the amount of sand needed to produce the cores and molds.]



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the production rate, in tons of sand handled, for each month; and
  - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

- (2) The permittee shall perform daily checks, when the emissions units are 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 emission incident; and
  - e. Any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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.

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 production rate limitation; and
  - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels.
- 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 e-Business 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.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) 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.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
2.16 tons of fugitive PM<sub>10</sub>/rolling, 12-month period



Applicable Compliance Method:

The rolling, 12-month period emission limitation was determined by multiplying the maximum sand throughput of 8,000 tons/rolling, 12-month period by an emission factor of 0.54 lb/ton of sand handled from WebFIRE, U.S. EPA database, then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated.

b. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit

Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.



**4. P901, Sand Preparation System**

**Operations, Property and/or Equipment Description:**

Mold making line including two mullers, conveying system, mold making, mold wash and mold release agents

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., b)(2)a., c)(1), d)(1), d)(2), d)(3), d)(4), e)(1), f)(1)a., f)(1)b., f)(1)c., f)(1)d. and f)(1)e.

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)	0.09 lb of particulate matter less than or equal to 10 microns in diameter (PM <sub>10</sub> )/hr and 0.11 ton PM <sub>10</sub> /rolling, 12-month period from the wet scrubber stack controlling the mullers and dry sand conveying system  0.11 ton of fugitive PM <sub>10</sub> /rolling, 12-month period from mold making fugitive emissions  Visible particulate emissions shall not exceed 20% opacity, as a six-minute average from the wet scrubber stack controlling the mullers and dry sand conveying system



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit 5.26 lbs of volatile organic compounds (VOC)/hr and 1.64 tons of VOC/rolling, 12-month period from coatings used in this emissions unit  See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-07(B)	See b)(2)c.
d.	OAC rule 3745-17-08(B)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
  - i. 0.09 lb of PM<sub>10</sub>/hr and 0.11 ton PM<sub>10</sub>/rolling, 12-month period from the wet scrubber stack controlling the mullers and dry sand conveying system;
  - ii. 0.11 ton of fugitive PM<sub>10</sub>/rolling, 12-month period from mold making fugitive emissions;
  - iii. Visible particulate emissions shall not exceed 20% opacity, as a six-minute average from the wet scrubber stack controlling the mullers and dry sand conveying system;
  - iv. Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - v. 5.26 lbs of VOC/hr and 1.64 tons of VOC/rolling, 12-month period from coatings used in this emissions unit.
- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant OAC rule 3745-31-05(D).
- c. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).



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

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)a.):

- a. The use of a wet scrubber on the mullers and dry sand conveying system that must achieve a minimum of 95% capture efficiency and a 95% control efficiency.
- b. The maximum VOC content for coating materials used in this emissions unit shall not exceed 5.08 lbs/gal.
- c. The maximum annual production rate for this emissions unit shall not exceed 8,000 tons of sand handled, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	1,600
1-2	3,200
1-3	4,800
1-4	8,000
1-5	8,000
1-6	8,000
1-7	8,000
1-8	8,000
1-9	8,000
1-10	8,000
1-11	8,000
1-12	8,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual production rate



limitation shall be based upon a rolling, 12-month summation of the production rates.

[Note: The maximum sand throughput is based upon the limited building space associated with the foundry floor. The inherent building space restrictions associated with the facility restricts the amount of cores and molds that can be made restricting the amount of sand needed to produce the cores and molds.]

- d. This permit establishes an operational restriction which limits the quantity of coating materials employed in this emission unit. The maximum rolling, 12-month quantity of coating materials employed in this emission unit, is limited by the following equation:

$$\sum_{i=1}^M [\sum_{j=1}^n (V_i)(T_{ij})] / 2,000 \text{ lbs} \leq 1.64 \text{ tons of VOC per year}$$

Where:

M = the increment of the rolling, 12-month period

n = the total number of unique coating materials employed in this emission unit;

V<sub>i</sub> = VOC content, in lbs/gallon of each coating material employed

T<sub>i</sub> = throughput, in gallons, of each coating material employed for the rolling, 12-month period

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission rates specified in the following table:

Maximum Allowable Cumulative VOC Emission Rates (tons):

Month(s)	VOC Emissions
1 – 1	0.14
1 – 2	0.28
1 – 3	0.42
1 – 4	0.56
1 – 12	1.64



After the first 12 months of operation following the issuance of this permit, compliance with the annual VOC limitation shall be based upon a rolling, 12-month summation of the monthly emission rates.

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

- (1) The permittee shall maintain monthly records of the following information:
  - a. the production rate, in tons of sand handled, for each month;
  - b. during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.
  - c. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.
- (2) The permittee shall collect and record the following VOC information each month for this emissions unit:
  - a. the name and identification number of each coating material employed;
  - b. the throughput of each coating material employed, in gallons;
  - c. the VOC content of each coating material employed, in lbs/gallon;
  - d. the VOC emission rate for each coating material employed, in tons per month [d)(2)b. times d)(2)c. times 1 ton/2,000 lbs];
  - e. the total VOC emission rate from all coating materials employed, in tons [the summation of d)(2)d.];
  - f. during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative monthly VOC emissions, in tons; and
  - g. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the VOC emissions, in tons.
- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubber stack controlling the mullers and dry sand conveying system of this emission unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;



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

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(3)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.

- (4) The permittee shall perform daily checks, when the emissions units are 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 emission incident; and
  - e. Any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(4)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.



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 maximum VOC content specified in c)(1)b.;
  - ii. all exceedances of the rolling, 12-month production rate limitation for sand handling specified in c)(1)c.;
  - iii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels for sand handling specified in c)(1)c.;
  - iv. all exceedances of the rolling, 12-month VOC limitation of 1.64 tons; and
  - v. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC emission limitations specified in c)(1)d.
- 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 e-Business 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.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(3) above:



- a. all days during which any visible particulate emissions were observed from the wet scrubber stack controlling the mullers and dry sand conveying system of this emission unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
- (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(4) 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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitations:  
0.09 lb of PM<sub>10</sub>/hr and 0.11 ton PM<sub>10</sub>/rolling, 12-month period from the wet scrubber stack controlling the mullers and dry sand conveying system  
  
Applicable Compliance Method:  
  
The hourly emission limitation was determined by multiplying the maximum sand throughput of 3.21 tons/hr by an emission factor of 0.58 lb/ton of sand handled (0.54 lb/ton for mold making from WebFIRE, U.S. EPA database plus 0.04 lb/ton from Ohio RACM Manual), then multiplying by 0.95 (95 percent capture efficiency of wet scrubber), then multiplying by [1 – 0.95] (control efficiency of wet scrubber). If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 – 4 of 40 CFR, Part 60, Appendix A and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.  
  
The rolling, 12-month period emission limitation was determined by multiplying the maximum sand throughput of 8,000 tons/rolling, 12-month period by an emission factor of 0.58 lb/ton of sand handled (0.54 lb/ton for mold making from WebFIRE, U.S. EPA database plus 0.04 lb/ton from Ohio RACM Manual), then multiplying by 0.95 (95 percent capture efficiency of wet scrubber), then multiplying by [1 – 0.95] (control efficiency of wet scrubber), then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated.



b. Emission Limitation:

0.11 ton of fugitive PM<sub>10</sub>/rolling, 12-month period from mold making fugitive emissions

Applicable Compliance Method:

The rolling, 12-month period emission limitation was determined by multiplying the maximum sand throughput of 8,000 tons/rolling, 12-month period by an emission factor of 0.58 lb/ton of sand handled (0.54 lb/ton for mold making from WebFIRE, U.S. EPA database plus 0.04 lb/ton from Ohio RACM Manual), then multiplying by 0.05 (percent not captured by wet scrubber inlet), then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated.

c. Emission Limitation:

5.26 lbs of VOC/hr

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with the limitation. If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 – 4, 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

1.64 tons of VOC/rolling, 12-month period from coatings used in this emissions unit

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation shall be demonstrated by the record keeping requirements in section d)(2).

e. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average from the baghouse stack serving this emissions unit

Applicable Compliance Method:

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



f. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



**5. P902, Magnesium Treatment**

**Operations, Property and/or Equipment Description:**

Magnesium Treatment

- 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., b)(2)a., c)(1), d)(1), d)(2), d)(3), e)(1), f)(1)a., f)(1)b., f)(1)c., f)(1)d. and f)(1)e.
- 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)	<p>0.28 lb of particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>)/hr and 0.31 ton of PM<sub>10</sub>/rolling, 12-month period from the baghouse exhaust stack</p> <p>1.63 tons of fugitive PM<sub>10</sub>/rolling, 12-month period from magnesium treatment fugitive emissions</p> <p>Visible particulate emissions shall not exceed 20% opacity, as a six-minute average from the baghouse stack serving this emissions unit</p> <p>Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		monitors, etc.) serving this emissions unit  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)c.
d.	OAC rule 3745-17-07(B)	See b)(2)e.
e.	OAC rule 3745-17-08(B)	See b)(2)e.
f.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V and Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
  - i. 0.28 lb of PM<sub>10</sub>/hr and 0.31 ton PM<sub>10</sub>/rolling, 12-month period from the baghouse exhaust stack; and
  - ii. 1.63 tons of fugitive PM<sub>10</sub>/rolling, 12-month period from magnesium treatment fugitive emissions.
  - iii. Visible particulate emissions shall not exceed 20% opacity, as a six-minute average from the baghouse stack serving this emissions unit; and
    - i. Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit.
- b. The Best Available Technology (BAT) requirements have been determined to be compliance with OAC rule 3745-31-05(D) and compliance with the terms and conditions of this permit.
- c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant OAC rule 3745-31-05(D).
- d. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).



c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)a.):

- a. The use of a baghouse that must achieve a minimum of 95% capture efficiency and a 99% control efficiency.
- b. The maximum annual production rate for this emissions unit shall not exceed 36,247.68 tons of metal treated with magnesium, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	7,249.54
1-2	14,499.07
1-3	21,748.61
1-4	36,247.68
1-5	36,247.68
1-6	36,247.68
1-7	36,247.68
1-8	36,247.68
1-9	36,247.68
1-10	36,247.68
1-11	36,247.68
1-12	36,247.68

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.



d) Monitoring and/or Recordkeeping Requirements

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

- a. the production rate, in tons of metal treated with magnesium, for each month; and
- b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates listed in d)(1)a. above.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

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

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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.

(3) The permittee shall perform daily checks, when the emissions units are 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 emission incident; and
- e. Any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(3)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.

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 production rate limitation; and
    - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels.
  - 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 e-Business 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.
  - (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) above:
    - a. all days during which any visible particulate emissions were observed from the baghouse stack serving this emission unit; and
    - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
  - (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(3) 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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitations:

0.28 lb of PM<sub>10</sub>/hr and 0.31 ton PM<sub>10</sub>/rolling, 12-month period from the baghouse exhaust stack

Applicable Compliance Method:

The hourly emission limitation was determined by multiplying the maximum amount of magnesium treated metal of 16.2 tons/hr by an emission factor of 1.8 lb/ton of metal treated from AP-42, Table 12.10-7, then multiplying by 0.95 (95 percent capture efficiency of baghouse), then multiplying by [1 – 0.99] (control efficiency of baghouse). If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 – 4 of 40 CFR, Part 60, Appendix A and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.



The rolling, 12-month period emission limitation was determined by multiplying the maximum amount of magnesium treated metal of 36,247.68 tons/rolling, 12-month period by an emission factor of 1.8 lb/ton of metal treated from AP-42, Table 12.10-7, then multiplying by 0.95 (95 percent capture efficiency of baghouse), then multiplying by [1 – 0.99] (control efficiency of baghouse), then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated

b. Emission Limitation:

1.63 tons of fugitive PM<sub>10</sub>/rolling, 12-month period from magnesium treatment fugitive emissions

Applicable Compliance Method:

The rolling, 12-month period emission limitation was determined by multiplying the maximum amount of magnesium treated metal of 36,247.68 tons/rolling, 12-month period by an emission factor of 1.8 lb/ton of metal treated from AP-42, Table 12.10-7, then multiplying by 0.05 (percent not captured by baghouse inlet), then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the rolling, 12-month period production restriction, compliance with the rolling, 12-month period emission limitation shall also be demonstrated

c. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average from the baghouse stack serving this emissions unit

Applicable Compliance Method:

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

d. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity, as a three-minute average from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit

Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.