



Environmental Protection Agency

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

6/22/2012

SCOTT E FERGUSON  
CAST METALS INC  
PO BOX 87  
DESHLER, OH 43516

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0335000015  
Permit Number: P0106107  
Permit Type: Initial Installation  
County: Henry

Certified Mail

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

Dear Permit Holder:

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

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

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NWDO





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
CAST METALS INC**

Facility ID:	0335000015
Permit Number:	P0106107
Permit Type:	Initial Installation
Issued:	6/22/2012
Effective:	6/22/2012
Expiration:	6/22/2022





Division of Air Pollution Control
Permit-to-Install and Operate
for
CAST METALS INC

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## Authorization

Facility ID: 0335000015

Application Number(s): A0039223

Permit Number: P0106107

Permit Description: This is an initial installation for all processes that create emissions within the gray iron foundry. Included in this permit are two electric induction furnaces, inoculation, mold and core making lines (both baked and no bake), grinding operations, pouring cooling and shakeout, and a shotblaster.

Permit Type: Initial Installation

Permit Fee: \$2,800.00

Issue Date: 6/22/2012

Effective Date: 6/22/2012

Expiration Date: 6/22/2022

Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

CAST METALS INC  
104 W NORTH ST  
Deshler, OH 43516

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

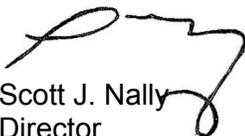
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0106107

Permit Description: This is an initial installation for all processes that create emissions within the gray iron foundry. Included in this permit are two electric induction furnaces, inoculation, mold and core making lines (both baked and no bake), grinding operations, pouring cooling and shakeout, and a shotblaster.

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

- Emissions Unit ID: F003**  
Company Equipment ID: Inoculation/Mg Treatment  
Superseded Permit Number:  
General Permit Category and Type: Not Applicable
- Emissions Unit ID: F004**  
Company Equipment ID: Pouring, Cooling and Shakeout  
Superseded Permit Number:  
General Permit Category and Type: Not Applicable
- Emissions Unit ID: F008**  
Company Equipment ID: Shakeout Sand Handling and Reclaim  
Superseded Permit Number:  
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P002**  
Company Equipment ID: Wheelabrator  
Superseded Permit Number:  
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P904**  
Company Equipment ID: No Bake Resin Area  
Superseded Permit Number:  
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P905**  
Company Equipment ID: Grinding  
Superseded Permit Number:  
General Permit Category and Type: Not Applicable

**Group Name: Baked Core Making Lines**

<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	Oil Core Making
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P902</b>
Company Equipment ID:	Small Shell Core Machine
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P903</b>
Company Equipment ID:	Large Shell Core Machine
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

**Group Name: Electric Induction Furnaces**

<b>Emissions Unit ID:</b>	<b>F001</b>
Company Equipment ID:	Electric Induction Furnace A
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F002</b>
Company Equipment ID:	Electric Induction Furnace B
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

**Group Name: Mold Making Lines**

<b>Emissions Unit ID:</b>	<b>F005</b>
Company Equipment ID:	Cope and Drag Mold Making
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F006</b>
Company Equipment ID:	Mold Making Machine
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F007</b>
Company Equipment ID:	Mold Making Machine
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

## **A. Standard Terms and Conditions**

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

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

**2. Who is responsible for complying with this permit?**

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

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

**3. What records must I keep under this permit?**

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

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

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

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

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

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

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

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

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

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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the 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.

## **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) The Ohio EPA has determined that this facility may be applicable to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>  
  
The area source MACT/GACT rules that may be applicable include 40 CFR, Part 63, Subpart ZZZZZ (Area Sources Iron and Steel Foundries) and 40 CFR Part 63, Subpart XXXXXX (Metal Fabrication & Finishing Source Nine Categories) [Area Source].

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

**1. F003, Ductile Inoculation/Mg Treatment**

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

Magnesium treatment occurs in the Tundish ladle. The inoculation table is used in the 4 malleable ladles used during each pour as well as the tundish ladle. The inoculation table uses other metals to allow for the correct chemistry in the melted metal.

- 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. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	3.78 tons fugitive particulate emissions (PE)/yr  Visible fugitive PE 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. and b)(2)d.
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. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of a building enclosure and compliance with the terms and conditions of this permit.
- 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 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- d. The 3.78 tons fugitive PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 14,000 tons/yr by an emission factor of 1.8 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton and applying a 70% control efficiency for the building enclosure.

[Note: The maximum iron melt rate 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 melted iron needed to produce the castings.]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
- a. All days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
- b. Any corrective actions taken to minimize or eliminate visible emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:  
3.78 tons fugitive PE/yr

Applicable Compliance Method:

The 3.78 tons fugitive PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, recordkeeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 14,000 tons/yr by an emission factor of 1.8 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton and applying a 70% control efficiency for the building enclosure.

b. Emission Limitation:

Visible fugitive PE shall not exceed 20% opacity, as a 3-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 PE emissions limitation shall be demonstrated in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

**2. F004, Pouring, Cooling and Shakeout**

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

These operations are conducted on the floor of the facility and all occur in the same location. The metal is poured and is left to cool for up to one day and is shaken out by hitting the mold with a mallet.

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

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

(2) Additional Terms and Conditions

a. 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).

b. 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) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

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. None.

g) Miscellaneous Requirements

(1) None.

**3. F008, Shakeout Sand Handling and Reclaim**

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

The shakeout sand is mixed with virgin sand on the shakeout floor and is then taken by bobcat to the mullor where it is reclaimed.

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	4.05 tons fugitive particulate emissions (PE)/yr  Visible fugitive PE 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. and b)(2)d.
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. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of a building enclosure and compliance with the terms and conditions of this permit.
- 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 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- d. The 4.05 tons fugitive PE/yr emissions limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum sand throughput of 7500 tons/yr by an emission factor of 3.6 lbs PE/ton sand handled from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton and applying a 70% control efficiency for the building enclosure.

[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.]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. All days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - b. Any corrective actions taken to minimize or eliminate visible emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:  
4.05 tons fugitive PE/yr

Applicable Compliance Method:

The 4.05 tons fugitive PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, recordkeeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum sand throughput of 7500 tons/yr by an emission factor of 3.6 lbs PE/ton sand handled from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton and applying a 70% control efficiency for the building enclosure.

b. Emission Limitation:

Visible fugitive PE 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 PE emissions limitation shall be demonstrated in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

**4. P002, Wheelabrator**

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

Shotblaster

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	0.17 lb particulate emissions (PE)/hr; 0.74 ton PE/yr  Visible PE shall not exceed 20% opacity, as a six-minute average from the stack serving this emissions unit.  See b)(2)a.
b.	OAC rule 3745-17-11(B)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)b.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of a baghouse and compliance with the terms and conditions of this permit.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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)(1)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

(2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:

- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

0.17 lb PE/hr; 0.74 ton PE/yr

Applicable Compliance Method:

The hourly emission limitation was established by multiplying the metal melt rate of 1.01 tons/hr, provided by the permittee, by an emission factor of 17 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95) and applying a 99% control efficiency for the use of a baghouse.

If required, compliance with the hourly emission limitation shall be demonstrated in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hrs/yr, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

- b. Emission Limitation:

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

Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.

**5. P904, No Bake Resin Area**

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

No bake resin area using one sand mixer and one reclaimer to produce cores.

- 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. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	3.08 lbs particulate emissions (PE)/hr; 13.50 tons PE/yr from the stack serving this emissions unit  1.00 lb volatile organic compounds (VOC)/hr; 4.39 tons VOC/yr  Visible fugitive PE 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.  Visible PE shall not exceed 20% opacity, as a six-minute average from the stack serving this emissions unit.  See b)(2)a. and b)(2)e.

b.	OAC rule 3745-17-11(B)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)b.
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of a building enclosure and compliance with the terms and conditions of this permit.

Note: The fugitive emissions from this emissions unit are negligible and will not be included in the emission limitation.

- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 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).
- e. The 3.08 lbs PE/hr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\* The potential to emit is determined by multiplying the maximum sand throughput of 1712 lbs/hr by an emission factor of 3.6 lb PE/ton sand handled from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

The 13.50 tons PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum sand throughput of 7500 tons/yr by an emission factor of 3.6 lb PE/ton sand handled from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

The 1.00 lb VOC/hr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is based upon a maximum sand throughput of 1712 lbs/hr and an emission factor of 1.17 lb VOC/ton for phenolic urethane no-bake core making (Ohio EPA/OCMA MOU, dated February 16, 1998), then dividing by 2000 lbs/ton.

The 4.39 tons VOC/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is based upon a maximum sand throughput of 7500 tons/yr and an emission factor of 1.17 lb VOC/ton for phenolic urethane no-bake core making (Ohio EPA/OCMA MOU, dated February 16, 1998).

[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.]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

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

taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall 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 an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all days during which any visible particulate emissions were observed from the stacks serving this emissions unit; and

- b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The permittee shall also 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 visible emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

3.08 lbs PE/hr; 13.50 tons PE/yr

Applicable Compliance Method:

The 3.08 lbs PE/hr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\* The potential to emit is determined by multiplying the maximum sand throughput of 1712 lbs/hr by an emission factor of 3.6 lb PE/ton sand handled from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

If required, compliance with the hourly emission limitation shall be demonstrated in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The 13.50 tons PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum sand throughput of 7500 tons/yr by an emission factor of 3.6 lb PE/ton sand handled from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

b. Emission Limitations:

1.00 lb PE/hr; 4.39 tons VOC/yr

Applicable Compliance Method:

The 1.00 lb VOC/hr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

If required, compliance with the hourly emission limitation shall be demonstrated in accordance with Methods 1-4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

\*The potential to emit is based upon a maximum sand throughput of 1712 lbs/hr and an emission factor of 1.17 lb VOC/ton for phenolic urethane no-bake core making (Ohio EPA/OCMA MOU, dated February 16, 1998), then dividing by 2000 lbs/ton.

The 4.39 tons VOC/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is based upon a maximum sand throughput of 7500 tons/yr and an emission factor of 1.17 lb VOC/ton for phenolic urethane no-bake core making (Ohio EPA/OCMA MOU, dated February 16, 1998).

c. Emission Limitation:

Visible fugitive PE 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 PE emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

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

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.

**6. P905, Grinding**

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

There are four grinders made up of two lines with all four vented to the same baghouse.

- 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. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	0.02 lb particulate emissions (PE)/hr; 0.09 ton PE/yr  Visible fugitive PE 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.  Visible PE shall not exceed 10% opacity, as a six-minute average from the stack serving this emissions unit.  See b)(2)a. and b)(2)e.
b.	OAC rule 3745-17-11(B)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)b.
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements have been determined to be the use of a baghouse and compliance with the terms and conditions of this permit.

Note: The fugitive emissions from this emissions unit are negligible and will not be included in the emission limitation.

- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 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).
- e. The 0.02 lb PE/hr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, recordkeeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 1.01 tons/hr by an emission factor of 1.7 lbs PE/ton metal melted from U.S. EPA FIRE version 6.25 and applying a 99% control efficiency for the use of a baghouse.

The 0.09 ton PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, recordkeeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 1.01 tons/hr by an emission factor of 1.7 lbs PE/ton metal melted from U.S. EPA FIRE version 6.25 by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton and applying a 99% control efficiency for the use of a baghouse.

[Note: The maximum iron melt rate 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 melted iron needed to produce the castings.]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (2) The permittee shall 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 an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all days during which any visible particulate emissions were observed from the stacks serving these emissions units; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The permittee shall also 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 these emissions units; and
  - b. Any corrective actions taken to minimize or eliminate visible emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

0.02 lb PE/hr; 0.09 ton PE/yr

Applicable Compliance Method:

The 0.02 ton PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 1.01 tons/hr by an emission factor of 1.7 lbs PE/ton metal melted from U.S. EPA FIRE version 6.25 and applying a 99% control efficiency for the use of a baghouse.

If required, compliance with the hourly emission limitation shall be demonstrated in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The 0.09 ton PE/yr emission limitation for this emissions unit represents the potential to emit\* for this emissions unit. Therefore, no monitoring, recordkeeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 1.01 tons/hr by an emission factor of 1.7 lbs PE/ton metal melted from U.S. EPA FIRE version 6.25 by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton and applying a 99% control efficiency for the use of a baghouse.

b. Emission Limitation:

Visible fugitive PE 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 PE emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a six-minute average from the stack serving this emissions unit

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.

**7. Emissions Unit Group -Baked Core Making Lines: P901,P902,P903**

EU ID	Operations, Property and/or Equipment Description
P901	The oil core making station consists of one mixer, one small batch oven and one large batch oven. The sand is mixed in the mixer and molded manually on a table then placed into the respective oven.
P902	Small Shell Core Machine
P903	Large Shell Core Machine

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	1.76 lbs particulate emissions (PE)/hr; 7.7 tons PE/yr from P901-P903, combined  Visible fugitive PE 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.  Visible PE shall not exceed 20% opacity, as a six-minute average from the stack serving this emissions unit.  See b)(2)a. and b)(2)e.

b.	OAC rule 3745-17-11(B)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)b.
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirement has been determined to be compliance with the terms and conditions of this permit.

Note: The fugitive emissions from this emissions unit are negligible and will not be included in the emission limitation.

- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 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).
- e. The 1.76 lbs PE/hr emission limitation for emissions units P901-P903, combined represents the potential to emit\* for these emissions units. Therefore, no monitoring, recordkeeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 3196 lbs/hr for P901-P903, combined by an emission factor of 1.1 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

The 7.7 tons PE/yr emission limitation for emissions units P901-P903, combined represents the potential to emit\* for these emissions units. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 14,000 tons/yr for P901-P903, combined by an emission factor of 1.1 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

[Note: The maximum iron melt rate 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 melted iron needed to produce the castings.]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

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

- (2) The permittee shall 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 an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all days during which any visible particulate emissions were observed from the stacks serving these emissions units; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The permittee shall also 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 these emissions units; and
  - b. Any corrective actions taken to minimize or eliminate visible emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

1.76 lbs PE/hr; 7.7 tons PE/yr from P901-P903, combined

Applicable Compliance Method:

The 1.76 lbs PE/hr emission limitation for emissions units P901-P903, combined, represents the potential to emit\* for these emissions units. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 3196 lbs/hr for P901-P903, combined by an emission factor of 1.1 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

If required, compliance with the hourly emission limitation shall be demonstrated in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The 7.7 tons PE/yr emission limitation for emissions units P901-P903, combined represents the potential to emit\* for these emissions units. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 14,000 tons/yr for P901-P903, combined by an emission factor of 1.1 lbs PE/ton metal melted from AP-42 Table 12.10-7 (1/95), then dividing by 2000 lbs/ton.

b. Emission Limitation:

Visible fugitive PE 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 PE emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

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

Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.

**8. Emissions Unit Group -Electric Induction Furnaces: F001,F002**

EU ID	Operations, Property and/or Equipment Description
F001	Inductotherm 1200 lb batch electric induction furnace A
F002	Inductotherm 1200 lb batch electric induction furnace B

- 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. None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	1.89 tons fugitive particulate emissions (PE)/yr from charging, melting and tapping for emissions units F001-F002, combined  Visible fugitive PE 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)d.
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. The Best Available Technology (BAT) requirements have been determined to be the use of a building enclosure and compliance with the terms and conditions of this permit.
- 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).
- d. The 1.89 tons fugitive PE/yr emission limitation for emissions units F001-F002, combined, represents the potential to emit\* for these emissions units. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 14,000 tons/yr for F001-F002, combined, by an emission factor of 0.9 lb PE/ton metal melted from AP-42 Table 12.10-3 (1/95), then dividing by 2000 lbs/ton and applying a 70% control efficiency for the building enclosure.

[Note: The maximum iron melt rate 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 melted iron needed to produce the castings.]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. All days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving these emissions units; and
  - b. Any corrective actions taken to minimize or eliminate visible emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

1.89 tons fugitive PE/yr from charging, melting and tapping for emissions units F001-F002, combined

Applicable Compliance Method:

The 1.89 tons fugitive PE/yr emission limitation for emissions units F001-F002, combined represents the potential to emit\* for these emissions units. Therefore, no monitoring, record keeping or reporting requirements are necessary to demonstrate compliance with the emission limitation.

\*The potential to emit is determined by multiplying the maximum metal melt rate of 14,000 tons/yr for F001-F002, combined by an emission factor of 0.9 lb PE/ton metal melted from AP-42 Table 12.10-3 (1/95), then dividing by 2000 lbs/ton and applying a 70% control efficiency for the building enclosure.

b. Emission Limitation:

Visible fugitive PE 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 PE emissions limitation shall be demonstrated in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

**9. Emissions Unit Group -Mold Making Lines: F005,F006,F007**

EU ID	Operations, Property and/or Equipment Description
F005	Sand is poured into a bin and is conveyed to the mold making machine 1.
F006	The sand is placed into a bin and conveyed to the mold making machine.
F007	Sand is conveyed from a bin to the mold making machine.

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) Applicable Emissions Limitations and/or Control Requirements

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

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

(2) Additional Terms and Conditions

a. 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).

b. 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) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

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.

g) Miscellaneous Requirements

(1) None.