



**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

11/22/2010

Michael Phillips
Coronado Steel
2360 Funston Dr.
Youngstown, OH 44510

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0250112010
Permit Number: P0106653
Permit Type: Initial Installation
County: Mahoning

Certified Mail

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

Dear Permit Holder:

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

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Kevin Boyce," 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, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Coronado Steel**

Facility ID: 0250112010
Permit Number: P0106653
Permit Type: Initial Installation
Issued: 11/22/2010
Effective: 11/22/2010
Expiration: 11/22/2020



Division of Air Pollution Control
Permit-to-Install and Operate
for
Coronado Steel

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Authorization

Facility ID: 0250112010
Application Number(s): A0039942
Permit Number: P0106653
Permit Description: Initial permit for installed steel foundry.
Permit Type: Initial Installation
Permit Fee: \$2,400.00
Issue Date: 11/22/2010
Effective Date: 11/22/2010
Expiration Date: 11/22/2020
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Coronado Steel
2360 Funston Dr
Youngstown, OH 44510

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

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


Chris Korleski
Director



Authorization (continued)

Permit Number: P0106653
Permit Description: Initial permit for installed steel foundry.

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

Emissions Unit ID:	F001
Company Equipment ID:	Pouring and Cooling
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Shakeout
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F003
Company Equipment ID:	Grinding And Finishing
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	Shotblast
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	Shotblast
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	Mold and Core Making
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast 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 submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

¹ 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).

under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR part 63 Subpart ZZZZZ, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources. Although Ohio EPA has determined that this area source MACT (also known as the GACT) applies, 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 this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>.

C. Emissions Unit Terms and Conditions



1. F001, Pouring and Cooling

Operations, Property and/or Equipment Description:

Pouring and cooling operation from 9 electric induction furnaces

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)	Fugitive particulate emissions (PE/PM-10) shall not exceed 11.55 pounds per hour (lbs/hr). Visible fugitive PE shall not exceed 10% opacity, as a three-minute average. Use of best available control measures. See b)(2)a.
b.	OAC rule 3745-31-05(E) (State Synthetic Minor to avoid modeling for PM-10)	Fugitive PE/PM-10 shall not exceed 8.66 tons per year (TPY). See c)(1) and c)(2).
c.	OAC rule 3745-17-07(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).
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established pursuant to OAC



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee shall implement maintenance procedures that are sufficient to minimize or eliminate visible PE of fugitive dust.

c) Operational Restrictions

- (1) The maximum annual metal production for this emissions unit shall not exceed 4,125 tons per year.
- (2) A maximum of three electric induction furnaces shall be operated simultaneously for the purpose of scrap melting.

d) Monitoring and/or Recordkeeping Requirements

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the 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 collect and record the following information each month for this emissions unit:

- a. the amount of metal produced, in tons; and



- b. the annual, year to date metal production [sum of d)(2)a for each calendar month to date, from January to December] in tons.
- (3) The permittee shall record all periods of time during which more than three electric induction furnaces were operated simultaneously for the purpose of scrap melting.
- e) Reporting Requirements
 - (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
 - (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) and the operations monitoring in d)(3) above:
 - a. all days during which any visible particulate emissions were observed escaping from the building housing this emissions unit;
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions; and
 - c. identify all time periods during which more than three electric induction furnaces operated simultaneously for the purpose of scrap melting.
- f) Testing Requirements
 - (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method:
 - a. Emission Limitation:

Visible fugitive PE shall not exceed 10% opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
 - b. Emission Limitation:

Fugitive PE/PM-10 shall not exceed 11.55 lbs/hr and 8.66 TPY.

Applicable Compliance Method:

To determine the actual short term PE rate for the pouring and cooling operations the following equation shall be used:

$$E = [\text{maximum tons of metal produced (tons metal/hr)} \times 2.8 \text{ pound PE/ton metal produced}] + [\text{maximum tons of metal produced (tons metal/hr)} \times 1.4 \text{ pound PE/ton metal produced}]$$

where:

E = fugitive PE (lbs/hr);

maximum tons of metal produced (tons metal/hr) = 2.75 tons/hr, based on maximum operation of 3 furnaces per hour;

2.8 pound PE/ton metal produced = emission factor for pouring and casting in pounds of PE per ton of metal produced (from the U.S. EPA online emission factor database, WebFIRE); and

1.4 pound PE/ton metal produced = emission factor for casting cooling in pounds of PE per ton of metal produced (from the U.S. EPA online emission factor database, WebFIRE).

The annual emission limitation was established by multiplying these emission factors by a maximum annual metal production rate of 4,125 tons. Therefore, provided compliance is shown with the maximum annual metal production, compliance with the annual fugitive PE limitation shall also be demonstrated.

g) Miscellaneous Requirements

(1) None.



2. F002, Shakeout

Operations, Property and/or Equipment Description:

Casting shakeout and associated material handling

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. 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)	Fugitive particulate emissions (PE/PM-10) shall not exceed 7.21 pounds per hour (lbs/hr). Volatile organic compound (VOC) emissions shall not exceed 3.30 lbs/hr and 2.48 TPY. Visible fugitive PE shall not exceed 10% opacity, as a three-minute average. Use of best available control measures. See b)(2)a, b)(2)b and b)(2)c.
b.	OAC rule 3745-31-05(E) (State Synthetic Minor to avoid modeling for PM-10)	Fugitive PE/PM-10 shall not exceed 5.40 tons per year (TPY). See c)(1).
c.	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures for this operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

Good housekeeping to minimize airborne particles, including sweeping and watering of the shakeout area, and also minimization of the drop height of the material into the roll-off container.

- b. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- c. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The maximum annual metal production for this emissions unit shall not exceed 4,125 tons per year.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each material processing and handling operation that is not adequately enclosed, the permittee shall perform inspections of such material processing and handling operations in accordance with the following minimum frequencies in order to determine if control measures need to be implemented:

<u>Material Handling Operation(s)</u>	<u>Minimum Inspection Frequency</u>
All Shakeout Operations	Once During Each Day of Operation

Nothing in this paragraph shall prohibit the permittee from employing other control measures, including an enclosure, to ensure compliance. The inspections shall be performed during representative, normal operating conditions.

- (2) The permittee shall maintain records of the following information for the material processing and handling operations:
- a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in "d" shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- (3) The permittee shall collect and record the following information each month for this emissions unit:
- a. the amount of metal produced, in tons; and
 - b. the annual, year to date metal production [sum of d)(3)a for each calendar month to date, from January to December] in tons.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) above:
- a. each day during which an inspection of the material processing and handling operations was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible fugitive PE shall not exceed 10% opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation:

Fugitive PE/PM-10 shall not exceed 7.21 lbs/hr and 5.40 TPY.

Applicable Compliance Method:

To determine the actual PE rate for the shakeout operation the following equation shall be used:

$E = (\text{maximum tons of metal produced (tons metal/hr)} \times 2.62 \text{ pound PE/ton metal produced})$

where:

$E = \text{fugitive PE (lbs/hr)}$;

maximum tons of metal produced (tons metal/hr) = 2.75 tons/hr, based on maximum operation of 3 furnaces per hour; and

2.62 pound PE/ton metal produced = emission factor for shakeout in pounds of PE per ton of metal produced (from the U.S. EPA online emission factor database, WebFIRE).

The annual emission limitation was established by multiplying these emission factors by a maximum annual metal production rate of 4,125 tons. Therefore, provided compliance is shown with the maximum annual metal production, compliance with the annual fugitive PE limitation shall also be demonstrated.

c. Emission Limitation:

VOC emissions shall not exceed 3.30 lbs/hr and 2.48 TPY.

Applicable Compliance Method:

To determine the actual VOC rate for the shakeout operation the following equation shall be used:

$E = (\text{maximum tons of metal produced (tons metal/hr)} \times 1.2 \text{ pound VOC/ton metal produced})$

where:

$E = \text{VOC (lbs/hr)}$;

maximum tons of metal produced (tons metal/hr) = 2.75 tons/hr, based on maximum operation of 3 furnaces per hour; and

1.2 pound VOC/ton metal produced = emission factor for shakeout in pounds of VOC per ton of metal produced (from the U.S. EPA online emission factor database, WebFIRE).

The annual emission limitation was established by multiplying these emission factors by a maximum annual metal production rate of 4,125 tons. Therefore, provided compliance is shown with the maximum annual metal production, compliance with the annual VOC limitation shall also be demonstrated.

g) **Miscellaneous Requirements**

(1) None.



3. F003, Grinding And Finishing

Operations, Property and/or Equipment Description:

Grinding And Finishing

- 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)	Fugitive particulate emissions (PE/PM-10) shall not exceed 4.68 pounds per hour (lbs/hr). Visible fugitive PE shall not exceed 10% opacity, as a three-minute average. Use of best available control measures. See b)(2)a.
b.	OAC rule 3745-31-05(E) (State Synthetic Minor to avoid modeling for PM-10)	Fugitive PE/PM-10 shall not exceed 3.51 tons per year (TPY). See c)(1).
c.	OAC rule 3745-17-07(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).
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule is less stringent than the control measures established pursuant to OAC



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee shall implement maintenance procedures that are sufficient to minimize or eliminate visible PE of fugitive dust.

c) Operational Restrictions

(1) The maximum annual metal production for this emissions unit shall not exceed 4,125 tons per year.

d) Monitoring and/or Recordkeeping Requirements

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the 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 collect and record the following information each month for this emissions unit:

- a. the amount of metal produced, in tons; and
- b. the annual, year to date metal production [sum of d)(2)a for each calendar month to date, from January to December] in tons.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed escaping from the building housing this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method:
 - a. Emission Limitation:

Visible fugitive PE shall not exceed 10% opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
 - b. Emission Limitation:

Fugitive PE/PM-10 shall not exceed 4.68 lbs/hr and 3.51 TPY.

Applicable Compliance Method:

To determine the actual fugitive PE rate for the grinding operations the following equation shall be used:

$$E = (\text{maximum tons of metal produced (tons metal/hr)} \times 1.7 \text{ pound PE/tons metal})$$

where:

E = fugitive PE (lbs/hr); and

1.6 pound PE/ton metal = emission factor for grinding in pounds of PE per ton of metal (from AP-42, Section 12.13, Table 12.13-2, 1/95).

The annual emission limitation was established by multiplying these emission factors by a maximum annual metal production rate of 4,125 tons. Therefore, provided compliance is shown with the maximum annual metal production, compliance with the annual fugitive PE limitation shall also be demonstrated.

g) Miscellaneous Requirements

- (1) None.



4. P001, Shotblast

Operations, Property and/or Equipment Description:

LS Industries Shotblast vented to a 2,000 acfm Modu-Kleen 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)	Particulate emissions (PE/PM-10) from the stack shall not exceed 1.51 pounds per hour (lbs/hr) and 3.20 tons per year (TPY). Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average, except as provided by the rule. See b)(2)a and c)(1).
b.	OAC rule 3745-17-07(A)	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.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

- (2) Additional Terms and Conditions
- a. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) The maximum annual metal production for this emissions unit shall not exceed 4,125 tons per year.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

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

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

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;

- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

- (2) Except for the initial loading of the filter media following a media change, the pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation.

This range of the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future PE tests that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

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

- (4) The permittee shall collect and record the following information each month for this emissions unit:
- a. the amount of metal produced, in tons; and
 - b. the annual, year to date metal production [sum of d)(4)a for each calendar month to date, from January to December] in tons.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):
- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
- a. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PE/PM-10 from the stack shall not exceed 1.51 lbs/hr and 3.20 TPY.

Applicable Compliance Method:

To determine the actual PE rate for the shotblast operation the following equation shall be used:

$$E = (\text{maximum tons of metal produced (tons metal/hr)} \times 15.5 \text{ pounds PE/ton metal}) \times (1 - \text{control efficiency of baghouse})$$

where:

$$E = \text{PE (lbs/hr);}$$

maximum tons of metal produced (tons metal/hr) = 0.975 ton/hr, based on design capacity of unit;

15.5 pounds PE/ton metal = emission factor for shotblasting in pounds of PE per ton of metal (from AP-42, Section 12.10, Table 12.10-7, 1/95); and

control efficiency of baghouse = estimated at 90%.

The annual emission limitation was established by multiplying these emission factors by a maximum annual metal production rate of 4,125 tons. Therefore, provided compliance is shown with the maximum annual metal production, compliance with the annual PE limitation shall also be demonstrated.

g) Miscellaneous Requirements

(1) None.



5. P002, Shotblast

Operations, Property and/or Equipment Description:

Pangborn 12GN-4R Shotblast vented to a 2,000 acfm Modu-Kleen 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)	Particulate emissions (PE/PM-10) from the stack shall not exceed 1.51 pounds per hour (lbs/hr) and 3.20 tons per year (TPY). Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average, except as provided by the rule. See b)(2)a and c)(1).
b.	OAC rule 3745-17-07(A)	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.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

- (2) Additional Terms and Conditions
- a. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) The maximum annual metal production for this emissions unit shall not exceed 4,125 tons per year.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis and record the number of days following a media change that are required to meet the minimum pressure drop. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

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

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

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;

- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

- (2) Except for the initial loading of the filter media following a media change, the pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation.

This range of the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future PE tests that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

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

- (4) The permittee shall collect and record the following information each month for this emissions unit:
- a. the amount of metal produced, in tons; and
 - b. the annual, year to date metal production [sum of d)(4)a for each calendar month to date, from January to December] in tons.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):
- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
- a. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PE from the stack shall not exceed 1.51 lbs/hr and 3.20 TPY.

Applicable Compliance Method:

To determine the actual PE rate for the shotblast operation the following equation shall be used:

$E = (\text{maximum tons of metal produced (tons metal/hr)} \times 15.5 \text{ pounds PE/ton metal}) \times (1 - \text{control efficiency of baghouse})$

where:

$E = \text{PE (lbs/hr)}$;

maximum tons of metal produced (tons metal/hr) = 0.975 ton/hr, based on design capacity of unit;

15.5 pounds PE/ton metal = emission factor for shotblasting in pounds of PE per ton of metal (from AP-42, Section 12.10, Table 12.10-7, 1/95); and

control efficiency of baghouse = estimated at 90%.

The annual emission limitation was established by multiplying these emission factors by a maximum annual metal production rate of 4,125 tons. Therefore, provided compliance is shown with the maximum annual metal production, compliance with the annual PE limitation shall also be demonstrated.

g) Miscellaneous Requirements

(1) None.



6. P901, Mold and Core Making

Operations, Property and/or Equipment Description:

Mold and Core Making, with mixing operation controlled by 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)	Particulate emissions (PE/PM-10) from the baghouse stack shall not exceed 0.01 pound per hour (lb/hr) and 0.04 ton per year (TPY). Fugitive particulate emissions (PE/PM-10) shall not exceed 0.11 lb/hr and 0.47 TPY. Organic compound (OC) emissions shall not exceed 9.45 lbs/hr and 9.83 TPY. Visible fugitive PE shall not exceed 10% opacity, as a three-minute average. Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average, except as provided by the rule



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a.
b.	OAC rule 3745-17-07(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.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep the following records each week:

- a. the identification of the resins, hardeners and washes used;
- b. the amount of resins, hardeners and washes used (in lbs);
- c. the organic compound content of the resins, hardeners and washes used (in % OC by weight);
- d. the pounds of organic compounds emitted, assuming 100% evaporative loss for the organic compounds (in lbs/wk);
- e. the hours of operation for the emissions unit; and
- f. the average organic compound emissions rate (d/e), in pounds/hour.

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

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;

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

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. 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
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

f) Testing Requirements

- (1) Compliance with the emission limitation in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:
PE/PM-10 from the baghouse stack shall not exceed 0.01 lb/hr and 0.04 TPY.

Applicable Compliance Method:

To determine the actual PE rate for the mold making operations the following equation shall be used:

$E = \text{maximum tons of sand handled (tons/hr)} \times 0.54 \text{ pound PE/ton sand handled} \times \text{capture} \times (1 - \text{control})$

where:

$E = \text{PE (lbs/hr)}$;

maximum tons of sand handled (tons/hr) = maximum capacity of equipment = 2 tons/hour;

0.54 pound PE/ton sand handled = emission factor for sand handling in pounds of PE per ton of sand handled (from AP-42, Section 12.13, Table 12.13-2, 1/95);

capture = estimated capture efficiency of equipment = 0.9; and

control = design control efficiency of equipment = 0.99.

The annual emission limitation was established by multiplying the short term emission rate by the maximum hours per year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the short term emission rate, compliance with the annual PE limitation shall also be demonstrated.

b. Emission Limitation:

Fugitive PE/PM-10 shall not exceed 0.11 lb/hr and 0.47 TPY.

Applicable Compliance Method:

To determine the actual fugitive PE rate for the mold making operations the following equation shall be used:

$E = \text{maximum tons of sand handled (tons/hr)} \times 0.54 \text{ pound PE/ton sand handled} \times (1 - \text{capture})$

where:

$E = \text{fugitive PE (lbs/hr)}$;

maximum tons of sand handled (tons/hr) = maximum capacity of equipment = 2 tons/hour;

0.54 pound PE/ton sand handled = emission factor for sand handling in pounds of PE per ton of sand handled (from AP-42, Section 12.13, Table 12.13-2, 1/95); and

capture = estimated capture efficiency of equipment = 0.9.

The annual emission limitation was established by multiplying the short term emission rate by the maximum hours per year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the short term emission rate, compliance with the annual PE limitation shall also be demonstrated.

c. Emission Limitation:

OC emissions shall not exceed 9.45 lbs/hr and 9.83 TPY.

Applicable Compliance Method:

Compliance with the short term limit shall be determined by the record keeping required in d)(1). The organic content of the resins, hardeners and washes shall be determined by U.S. EPA Method 24 or formulation data.

Compliance with the annual limit shall be determined by summing the lbs OC/week from the record keeping required in d)(1), and dividing by 2000 lbs/ton.

d. Emission Limitation:

Visible fugitive PE shall not exceed 10% opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

e. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.