



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

12/6/2012

Andrew Cole  
Mahle Engine Components USA, Inc.  
5130 N STATE RTE 60  
McConnelsville, OH 43756

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0658000201  
Permit Number: P0110987  
Permit Type: OAC Chapter 3745-31 Modification  
County: Morgan

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
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 Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

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

**How to appeal this permit**

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

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

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

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

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

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

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

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

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SEDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Mahle Engine Components USA, Inc.**

Facility ID:	0658000201
Permit Number:	P0110987
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	12/6/2012
Effective:	12/6/2012
Expiration:	8/1/2018





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Mahle Engine Components USA, Inc.

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**Final Permit-to-Install and Operate**  
Mahle Engine Components USA, Inc.  
**Permit Number:** P0110987  
**Facility ID:** 0658000201  
**Effective Date:** 12/6/2012

## Authorization

Facility ID: 0658000201  
Application Number(s): A0045312  
Permit Number: P0110987  
Permit Description: This permit is for a Chapter 31 modification by the addition of a Rough Mill to the South Strip Cast Line.  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$500.00  
Issue Date: 12/6/2012  
Effective Date: 12/6/2012  
Expiration Date: 8/1/2018  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Mahle Engine Components USA, Inc.  
5130 N STATE RTE 60  
McConnelsville, OH 43756

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

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

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

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



**Final Permit-to-Install and Operate**  
Mahle Engine Components USA, Inc.  
**Permit Number:** P0110987  
**Facility ID:** 0658000201  
**Effective Date:** 12/6/2012

## Authorization (continued)

Permit Number: P0110987  
Permit Description: This permit is for a Chapter 31 modification by the addition of a Rough Mill to the South Strip Cast Line.

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

<b>Emissions Unit ID:</b>	<b>P029</b>
Company Equipment ID:	P029
Superseded Permit Number:	P0104792
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Mahle Engine Components USA, Inc.  
**Permit Number:** P0110987  
**Facility ID:** 0658000201  
**Effective Date:** 12/6/2012

## **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, Southeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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



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

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

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

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

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

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



**Final Permit-to-Install and Operate**  
Mahle Engine Components USA, Inc.  
**Permit Number:** P0110987  
**Facility ID:** 0658000201  
**Effective Date:** 12/6/2012

## **B. Facility-Wide Terms and Conditions**



**Final Permit-to-Install and Operate**  
Mahle Engine Components USA, Inc.  
**Permit Number:** P0110987  
**Facility ID:** 0658000201  
**Effective Date:** 12/6/2012

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.



**Final Permit-to-Install and Operate**  
Mahle Engine Components USA, Inc.  
**Permit Number:** P0110987  
**Facility ID:** 0658000201  
**Effective Date:** 12/6/2012

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



**1. P029, Strip cast line**

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

Chapter 31 modification of the Strip cast line that operates at 2,095 lbs alloy/hr and includes: welding, washing, polishing, preheating, pouring/casting, oil quenching, rough milling, melting, cut-off, and a finish mill. The South Strip Cast Line consists of post-cast polishers (controlled by a Rotocloner with a 99% designed control efficiency), rough mill/skive (controlled by cyclone with a 50% designed control efficiency, which is also controlled by the rough mill baghouse with a 99% designed control efficiency), bronzing furnace pots and bronzing furnace (controlled by Baghouse #4 with a designed control efficiency of 99%, which is also controlled with a HEPA filter having a designed efficiency of 99%), quench chute (controlled by a sly scrubber with a designed control efficiency of 98%), and the new rough mill (controlled by cyclone with a 50% designed control efficiency, which is also controlled by the rough mill baghouse with a 99% designed control efficiency), all of which control particulate emissions (lead emissions are in the form of a particulate). This modification is for the addition of a Rough Mill to the South Strip Cast Line and supersedes PTIO #P0104792 issued October 13, 2009.

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. g)(1).

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Emissions shall not exceed the following:  1.183 pounds of stack particulate emissions (PE) per hour.  0.285 pounds of fugitivePE per hour.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		5.18 tons per year (TPY) of stack PE;  1.25 TPY of fugitive PE; and  See b)(2)a. below.
b.	OAC rule 3745-31-05(E) (Voluntary restriction to avoid modeling for lead)	Emissions shall not exceed 0.54TPY of lead.
c.	3745-31-05(C), as effective 12/01/06	See b)(2)b. below.
d.	OAC rule 3745-17-11 (Table I)	Total PE shall not exceed 4.23lb/hr.  This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(C), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.
e.	OAC rule 3745-17-07(A)(1)(a)	Visible PE from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-08(B) and 3745-17-07(B)	See b)(2)c. below.
g.	OAC rule 3745-18-06(E)(2)	Emissions of Sulfur Dioxide (SO <sub>2</sub> ) shall not exceed 31.00 lbs/hr.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.



Permit to Install and Operate P0104792 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. The permittee shall employ the associated control equipment, to reduce PE and lead emissions whenever the following emissions sources are in operation:

<u>Emissions source</u>	<u>Control equipment/ overall control efficiency</u>
Bronzing furnace pots & bronzing furnace	Baghouse # 4 – 98.01%
Bronzing furnace pots & bronzing furnace	HEPA filter – 98.01%
Quench chute	Sly Scrubber – 93.1%
Rough mill/ skive	Cyclone -49.5%
Rough mill/ skive	Rough mill baghouse- 98.01%
Rough mill/ NEW	Cyclone – 49.5%
Rough mill/ NEW	Rough mill baghouse- 98.01%
Post-cast polishers	Rotoclone – 89.1%

- c. This facility is located in Morgan County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.
- d. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the SOx, NOx, VOC, and CO emissions from this air contaminant source since the uncontrolled potential to emit for SOx, NOx, VOC, and CO emissions are less than ten tons per year.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across Baghouse #4 is between 4 to 7 inches of water; across the Rough Mill Baghouse is between 4 to 8



inches of water; and across the HEPA filter is maintained at or above 1.3 inches of water.

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across each of the following: Baghouse #4, Rough Mill Baghouse, and the HEPA filter when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across each baghouse and filter on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or 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:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. 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.



- (3) This range or limit on the pressure drop across the baghouses and filterare effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber, that must be maintained in order to demonstrate compliance, shall be between 55 to 65 pounds per square inch (gauge).In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall be between 14 to 18 gallons per minute.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge) and the scrubber liquid flow rate (in gallons per minute) during operation of this/these emissions unit(s), including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) 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 control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) 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:



- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop and flow rate readings immediately after the corrective action was implemented; and
- k. 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.

These range(s) and/or limit(s) for the pressure drop and liquid flow rate are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable particulate emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) 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.
- (3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouses and HEPA filter 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 or filter 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 and/or filter;



- 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.
- (4) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the wet scrubber 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 scrubber and/or the liquid flow rate was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;
  - 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 scrubber;
  - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in “a” or “b”where prompt corrective action, that would bring the pressure drop and/or liquid flow rate into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in “a”or “b” 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 specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
- a. Emissions Limitation:  
Stack particulate emissions (PE) shall not exceed 1.183 lbs/hr.  
Stack PE shall not exceed 5.18TPY.  
PE shall not exceed 4.23 lbs/hr.  
Applicable Compliance Method:  
Compliance with the hourly stack emission limitation is demonstrated by:



- multiplying the control device outlet rate for the Post-Cast Polishers of 0.01 gr/dscf by 2,500 acfm (EF obtained per application submitted by permittee) to arrive at 25 gr/min. multiplied by 60 min/hr to equal 1,500 gr/hr divided by 7,000 gr/lb to equal 0.21429 lb/hr;
- multiplying the control device outlet rate for the Rough Mill NEW of 0.01 gr/dscf by 2,000 acfm (EF obtained per application submitted by permittee) to arrive at 20 gr/min. multiplied by 60 min/hr to equal 1,200 gr/hr divided by 7,000 gr/lb to equal 0.17143 lb/hr;
- multiplying the control device outlet rate for the Rough Mill Skive of 0.01 gr/dscf by 2,000 acfm (EF obtained per application submitted by permittee) to arrive at 20 gr/min. multiplied by 60 min/hr to equal 1,200 gr/hr divided by 7,000 gr/lb to equal 0.17143 lb/hr;
- multiplying the control device outlet rate for the Bronzing furnace and bronzing pots of 0.01 gr/dscf by 29600 acfm (EF obtained per application submitted by permittee) to arrive at 296 gr/min. multiplied by 60 min/hr to equal 17,760 gr/hr divided by 7,000 gr/lb to equal 2.53714 lbs/hr. multiplied by 0.01 (control efficiency of the HEPA filter) to equal 0.02537 lb/hr and
- multiplying the control device outlet rate for the Quench Chute of 0.02 gr/dscf by 3,500 acfm (EF obtained per application submitted by permittee) to arrive at 70 gr/min. multiplied by 60 min/hr to equal 4,200 gr/hr divided by 7,000 gr/lb to equal 0.60 lb/hr.
- $0.21429 + 0.17143 + 0.17143 + 0.02537 + 0.60 = 1.183$  pounds per hour

To demonstrate compliance with the total annual stack emission limitation of 5.18 TPY, multiply 1.183 pounds per hour by 8,760 hours per year, then divide by 2,000 tons per year.

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

Fugitive PE shall not exceed 0.285lbs/hr.

Fugitive PE shall not exceed 1.25 tons per year (tpy).

Applicable Compliance Method:

Compliance with the hourly fugitive emission limitation is demonstrated by:

- multiplying the maximum process rate for the Post-Cast Polishers of 1.05 tons per hour by the emissions factor 0.024 pound per ton (EF based on mass balance of similar operation assumed equal to the finish mill) to arrive at uncontrolled emissions of 0.0252 pound per hour (assuming 90% capture efficiency of the rotoclone and 70% building capture efficiency (as submitted in application)), multiply 0.1 by 0.0252, for a total



- of 0.00252, then multiply 0.3 by 0.00252 pounds per hour to equal 0.000756 pounds per hour;
- multiplying the maximum process rate for the Rough Mill NEW of 1.05 tons per hour by the emissions factor 0.21 pound per ton (EF based on stack test data from the Bi-metal stack test conducted 5/2/95) to arrive at uncontrolled emissions of 0.2205 pound per hour (assuming 99% capture efficiency of the baghouse and 70% building capture efficiency (as submitted in application)), multiply 0.01 by 0.2205, for a total of 0.002205, then multiply 0.3 by 0.002205 pounds per hour to equal 0.0006615 pounds per hour;
  - multiplying the maximum process rate for the Rough Mill Skive of 1.05 tons per hour by the emissions factor 0.21 pound per ton (EF based on stack test data from the Bi-metal stack test conducted 5/2/95) to arrive at uncontrolled emissions of 0.2205 pound per hour (assuming 99% capture efficiency of the baghouse and 70% building capture efficiency (as submitted in application)), multiply 0.01 by 0.2205, for a total of 0.002205, then multiply 0.3 by 0.002205 pounds per hour to equal 0.0006615 pounds per hour;
  - multiplying the maximum process rate for the Bronzing furnace and bronzing pots of 1.05 tons per hour by the emissions factor 1.39 pound per ton (EF derived from #1 Milar Source Stack test 9/4/94) to arrive at uncontrolled emissions of 1.495 pounds per hour (assuming 99% capture efficiency of the baghouse (as submitted in application)), multiply 0.01 by 1.495, for a total of 0.01495 pounds per hour; and
  - multiplying the maximum process rate for the Quench Chute of 2.08 gallons per hour by the emissions factor 2.58 pounds per gallon (EF based on Quench Material MSDS) to arrive at uncontrolled emissions of 5.3664 pounds per hour (assuming 95% capture efficiency of the scrubber (as submitted in application)), multiply 0.05 by 5.3664, for a total of 0.26832 pounds per hour.
  - $0.000756 + 0.0006615 + 0.0006615 + 0.01495 + 0.26832 = 0.285$  pounds per hour

To demonstrate compliance with the total annual fugitive emission limitation of 1.25 TPY, multiply 0.285 pounds per hour by 8,760 hours per year, then divide by 2,000 tons per year.

c. Emissions Limitation:

Lead emissions shall not exceed 0.54 tpy.

Applicable Compliance Method:

The lead emission limit was established by multiplying the lead emissions factor in lbs/hr\*, provided by the permittee in their application, by the total possible hours of operation in a year, and then dividing by 2,000 lbs per ton as shown in the following equation:

$$(0.1224 \text{ lb/hr}^*) (8760 \text{ hr}) / (2000 \text{ lb/ton}) = 0.54 \text{ ton/yr}$$



Compliance with the annual emission limitation shall be demonstrated by multiplying the lead emissions factor in lbs/hr, established during the emissions testing required below, by the total number of hours of operation during the year, and then dividing by 2,000 lbs per ton.

If required, lead emissions shall be determined according to test Method 12 and/or 29, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:

Visible PE from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

e. Emissions Limitation:

Emissions of Sulfur Dioxide (SO<sub>2</sub>) shall not exceed 31.00 lbs/hr.

Applicable Compliance Method:

Compliance with the SO<sub>2</sub> emission limitation shall be demonstrated by the SO<sub>2</sub> emissions factor in lbs/hr (0.001 lbs/hr), provided by the permittee in their application.

If required, sulfur dioxide emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.