



Environmental
Protection Agency

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

7/3/2012

Jim Flanagan
BABCOCK AND WILCOX - FOUNDRY OPERATIONS
PO Box 351
BARBERTON, OH 44203

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1677020054
Permit Number: P0110094
Permit Type: Renewal
County: Summit

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)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

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

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

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

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: ARAQMD



FINAL

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

BABCOCK AND WILCOX - FOUNDRY OPERATIONS

Facility ID:	1677020054
Permit Number:	P0110094
Permit Type:	Renewal
Issued:	7/3/2012
Effective:	7/3/2012
Expiration:	4/17/2014



Division of Air Pollution Control
Permit-to-Install and Operate
for
BABCOCK AND WILCOX - FOUNDRY OPERATIONS

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Authorization

Facility ID: 1677020054
Application Number(s): A0044561
Permit Number: P0110094
Permit Description: Renewal of PTIO for various ancillary foundry operations.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 7/3/2012
Effective Date: 7/3/2012
Expiration Date: 4/17/2014
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

BABCOCK AND WILCOX - FOUNDRY OPERATIONS
600 Ford Avenue West
Barberton, OH 44203

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

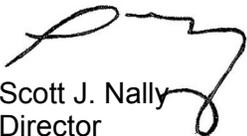
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Scott J. Nally
Director



Authorization (continued)

Permit Number: P0110094

Permit Description: Renewal of PTIO for various ancillary foundry operations.

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

Emissions Unit ID:	F019
Company Equipment ID:	Core Room (mixers)
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F021
Company Equipment ID:	Casting shakeout
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P019
Company Equipment ID:	Rotoblast #3
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P023
Company Equipment ID:	Mold/Core Washing
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P025
Company Equipment ID:	Rotoblast #4
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P909
Company Equipment ID:	Swing Grinders
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P910
Company Equipment ID:	Mold/Core Sand Unload/Storage
Superseded Permit Number:	P0103120
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P913
Company Equipment ID:	Sand Reclamation System
Superseded Permit Number:	P0103120
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 Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

C. Emissions Unit Terms and Conditions



1. F019, Core Room (mixers)

Operations, Property and/or Equipment Description:

Sand core making. Particulate emissions controlled by a fabric filter.

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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. It lists three rows (a, b, c) detailing OAC rules and control measures for sand transfer points.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The fabric filter serving this emissions unit shall achieve an outlet emissions rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there shall be no visible PE from the outlet, whichever is less stringent.</p> <p>Core sand shall have sufficient moisture content after mixing to minimize or eliminate visible PE from conveying and core making activities.</p>

(2) Additional Terms and Conditions

- a. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
- b. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop, in inches of water, across the fabric filter shall be based upon the manufacturer's recommendations, with any modifications deemed necessary by the permittee, until such time as any required emission testing is conducted that establishes an appropriate range or limit for the pressure drop while the emissions unit demonstrates compliance with the applicable particulate emissions limitation(s).

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:

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;

- b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;
 - b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:
Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

The fabric filter serving this emissions unit shall achieve an outlet emissions rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 5 and the procedures specified in OAC rule 3745-17-03(B)(7).

d. Emission Limitation:

No visible PE from the outlet of the fabric filter.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 22 and the methods and procedures specified in OAC rule 3745-17-03(B)(4).

g) Miscellaneous Requirements

(1) None.



2. F021, Casting shakeout

Operations, Property and/or Equipment Description:

Shakeout of castings. Particulate emissions controlled by a fabric filter.

- 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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. It contains three rows (a, b, c) detailing OAC rules and control measures for particulate emissions.



Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Row 1: standard cubic foot of exhaust gases or there shall be no visible PE from the outlet, whichever is less stringent.

(2) Additional Terms and Conditions

- a. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
b. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop, in inches of water, across the fabric filter shall be based upon the manufacturer's recommendations, with any modifications deemed necessary by the permittee, until such time as any required emission testing is conducted that establishes an appropriate range or limit for the pressure drop while the emissions unit demonstrates compliance with the applicable particulate emissions limitation(s).

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:

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

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:

- a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).
 - c. Emission Limitation:

The fabric filter serving this emissions unit shall achieve an outlet emissions rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 5 and the procedures specified in OAC rule 3745-17-03(B)(7).

d. Emission Limitation:

No visible PE from the outlet of the fabric filter.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 22 and the methods and procedures specified in OAC rule 3745-17-03(B)(4).

g) Miscellaneous Requirements

- (1) None.



3. P019, Rotoblast #3

Operations, Property and/or Equipment Description:

Cleaning of castings, 8 tons per hour maximum process weight rate capacity. Particulate emissions controlled by a fabric filter.

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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Rows include OAC rules 3745-17-07(A), 3745-17-07(B), 3745-17-08(B), and 3745-17-11(B) with corresponding emission control details.



Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Row 1: rate of emission of 48 pounds per hour. Figure II is more stringent than Table I.)

(2) Additional Terms and Conditions

- a. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
b. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop, in inches of water, across the fabric filter shall be based upon the manufacturer's recommendations, with any modifications deemed necessary by the permittee, until such time as any required emission testing is conducted that establishes an appropriate range or limit for the pressure drop while the emissions unit demonstrates compliance with the applicable particulate emissions limitation(s).

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:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;

- b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).
 - c. Emission Limitation:

PE from the fabric filter shall not exceed 7.04 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with the requirements in 40 CFR Part

60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

- g) Miscellaneous Requirements
 - (1) None.



4. P023, Mold/Core Washing

Operations, Property and/or Equipment Description:

Mold/Core washing typically with isopropyl alcohol. Emissions uncontrolled.

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 3745-21-07	None, exempt pursuant to OAC rule 3745-21-07(M)(3).

(2) Additional Terms and Conditions

a. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in solvents used, change in the method of operation, or any other change of this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.

c) Operational Restrictions

(1) The permittee shall not employ any photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5), in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the following information for this emissions unit:
 - a. the company identification of each liquid organic material, including cleanup material, employed in this emissions unit; and
 - b. whether or not each liquid organic material, including cleanup material, employed is a photochemically reactive material.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) In the annual PER, the permittee shall identify all instances a photochemically reactive material was used in accordance with the monitoring requirements in term number d)(1) above. The PER shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such use, in pounds.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. None.

g) Miscellaneous Requirements

- (1) None.

5. P025, Rotoblast #4

Operations, Property and/or Equipment Description:

Cleaning of castings performed in an enclosed blasting cabinet using metal shot, 10 tons per hour maximum process weight rate capacity. Particulate emissions controlled by a fabric filter.

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) (PTI 16-02360)	<p>Particulate emissions (PE) from the fabric filter shall not exceed 1.0 pounds per hour and 4.4 tons per year.</p> <p>Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.</p> <p>Visible PE from fugitive dust shall not exceed 5% opacity, as a 3-minute average.</p> <p>The abrasive blast cleaning shall be adequately enclosed and vented to a fabric filter; the enclosure(s) shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		good engineering design.
b.	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)* OAC rule 3745-17-08(B)* OAC rule 3745-17-11(B) (*applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emissions limits from these applicable rules are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The hourly and yearly PE limits established pursuant to OAC rule 3745-31-05(A)(3) are greater than the potential to emit of this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emissions limits.
- b. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
- c. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the fabric filter is between 1 to 8 inches of water.

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:

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.
 - (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
 - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

Visible PE from fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE from the fabric filter shall not exceed 1.0 pounds per hour and 4.4 tons per year.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with the requirements in 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

g) Miscellaneous Requirements

(1) None.

6. P909, Swing Grinders

Operations, Property and/or Equipment Description:

Grinding and cleaning of castings, 4 tons per hour maximum process weight rate capacity. Particulate emissions controlled by a fabric filter.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-07(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The grinding/cleaning machines shall be adequately enclosed and vented to a fabric filter; and the enclosure(s) shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
d.	OAC rule 3745-17-11(B)	PE from the fabric filter shall not exceed 4.50 pounds per hour (from Figure II, in the appendix, and an uncontrolled mass



Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Row 1: rate of emission of 24 pounds per hour. Figure II is more stringent than Table I.)

(2) Additional Terms and Conditions

- a. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
b. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop, in inches of water, across the fabric filter shall be based upon the manufacturer's recommendations, with any modifications deemed necessary by the permittee, until such time as any required emission testing is conducted that establishes an appropriate range or limit for the pressure drop while the emissions unit demonstrates compliance with the applicable particulate emissions limitation(s).

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:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;

- b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).
 - c. Emission Limitation:

PE from the fabric filter shall not exceed 4.50 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with the requirements in 40 CFR Part



60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

- g) Miscellaneous Requirements
 - (1) None.



7. P910, Mold/Core Sand Unload/Storage

Operations, Property and/or Equipment Description:

Transfer & storage of core/mold sand, 10 tons/hour maximum process weight rate capacity, including pneumatic unloading of sand to storage silos, mechanical unloading & transport of sand to sand reclaim system hopper, and mechanical unloading & transport of sand to sand tower. Particulate emissions controlled by a fabric filter.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-07(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	All sand transfer points within this emissions unit shall be hooded and vented to a fabric filter; the process equipment shall be adequately enclosed and vented to a fabric filter; and all enclosures within the emissions unit shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the



Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Row d: OAC rule 3745-17-11(B), PE from the fabric filter shall not exceed 9.14 pounds per hour...

(2) Additional Terms and Conditions

- a. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
b. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop, in inches of water, across the fabric filter shall be based upon the manufacturer's recommendations, with any modifications deemed necessary by the permittee, until such time as any required emission testing is conducted that establishes an appropriate range or limit for the pressure drop while the emissions unit demonstrates compliance with the applicable particulate emissions limitation(s).

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:

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.

- (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:

PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE from the fabric filter shall not exceed 9.14 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with the requirements in 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

g) Miscellaneous Requirements

(1) None.



8. P913, Sand Reclamation System

Operations, Property and/or Equipment Description:

Breakdown of sand agglomerates from casting shakeout process, 6 tons/hour maximum process weight rate capacity. Particulate emissions controlled by a fabric filter.

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) (PTI 16-02022)	Particulate emissions (PE) from the fabric filter shall not exceed 5.6 pounds per hour and 24.5 tons per year. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B).
b.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-07(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.
d.	OAC rule 3745-17-08(B) (applicable only if this emissions unit	All material transfer/drop-off points shall be of minimal height, and be adequately

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	is located in an area identified in Appendix A of OAC rule 3745-17-08)	enclosed and vented to a fabric filter; the enclosure(s) shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
e.	OAC rule 3745-17-11(B)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The hourly and yearly PE limits established pursuant to OAC rule 3745-31-05(A)(3) reflect the potential to emit of this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emissions limits.
- b. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in materials processed, change in the method of operation, or any other change to this emissions unit that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
- c. The emissions from this emissions unit shall be vented to a fabric filter at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) and for any visible emissions of fugitive dust from the non stackegress 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.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter 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 fabric filter on a weekly 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.

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the fabric filter is between 1 to 8 inches of water.

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:

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted 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.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall also identify the following information in the annual PER 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 any stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from any non stack egress point (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 and/or visible fugitive particulate emissions.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of the fabric filter during the 12-month reporting period for this emissions unit group, in accordance with the requirements in term number d)(3) above:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the acceptable range;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of 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;
 - d. an identification of 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; and
 - e. an identification of each incident when the fabric filter was not in service while any emissions unit of this emissions unit group was in operation.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - b. Emission Limitation:
Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE from the fabric filter shall not exceed 5.6 pounds per hour and 24.5 tons per year.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with the requirements in 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

g) Miscellaneous Requirements

(1) None.