

Facility ID: 1677020054 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Facility ID: 1677020054 Emissions Unit ID: F019 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Mechanical conveying of core sand: from truck to storage silo, from storage silo to binder/sand mixers, and from binder/sand mixers to core making machine; particulate emissions (PE) controlled by a fabric filter; emissions of organic compounds (OC) uncontrolled.	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.
	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 emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	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 the emissions unit shall be hooded and vented to a fabric filter; the sand hopper, storage silo, and sand elevator(s) shall be adequately enclosed and vented to a fabric filter; and all enclosures shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.
		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.
Core making using the following volatile organic compound containing binder systems:  Core Oil; and	OAC rule 3745-21-07(G)	Core sand shall have sufficient moisture content after mixing to minimize or eliminate visible PE from conveying and core making activities.  OC emissions shall not exceed 8 pounds/hour and 40 pounds/day on any day photochemically reactive material(s), as defined in OAC rule 3745-21-01(C)(5), is/are employed.

Ester-Cured Phenolic No-bake.

2. **Additional Terms and Conditions**

- (a) The permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

B. **Operational Restrictions**

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

C. **Monitoring and/or Record Keeping Requirements**

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

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

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

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

3. The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.

4. The permittee shall keep the following records each day this emissions unit operates and employs any photochemically reactive material(s):

- a. the company identification of the liquid organic materials employed;
- b. the amounts, in pounds, of liquid organic materials for each binder system used;
- c. the number of hours of operation;
- d. an estimate of the daily organic compound emissions from all liquid organic materials, in lbs/day, using the following organic compound emission factors for the binder systems used:
  - i. Core Oil: 0.05 pound of organic compounds per pound of oil; and
  - ii. Ester-Cured Phenolic No-bake: 0.0002 pound of organic compounds per pound of resin; and
- f. an estimate of the average hourly organic compound emission rate, in lbs/hr.

D. **Reporting Requirements**

1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
4. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 lbs/hr, and the actual average hourly organic compound emissions for each such day; and
  - b. an identification of each day during which the organic compound emissions exceeded 40 lbs/day, and the actual organic compound emissions for each such day.

These reports are due by the dates described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. **Testing Requirements**

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in

accordance with the following methods:

Emission Limitation: 20% opacity as a 6-minute average (stack emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

Emission Limitation: 20% opacity as a 3-minute average (fugitive emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).

Emission Limitation: no visible emissions

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).

Emission Limitation: 0.030 gr/dscf of PE

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

Emission Limitation: 40 lbs/day of organic compounds

Applicable Compliance Method:  $D = (C \times O) + (E \times R)$

where:

D = daily organic compound emission rate, in lbs/day;

C = 0.05 pound of organic compounds per pound of oil, emission factor for the Core Oil binder system;

O = pounds of oil binder used each day with the Core Oil binder system;

E = 0.0002 pound of organic compounds per pound of resin, emission factor for the Ester-Cured Phenolic No-bake binder system; and

R = pounds of resin binder used each day with the Ester-Cured Phenolic No-bake binder system.

[Note: The above organic compound emission factors are either specified by the manufacturer or derived from manufacturer's data.]

Emission Limitation: 8 lbs/hr of organic compounds

Applicable Compliance Method:  $H = D/T$

where:

H = average hourly organic compound emission rate, in lbs/hr;

D = daily organic compound emission rate, in lbs/day, as determined in section E.1.e above; and

T = hours of operation per day.

**F. Miscellaneous Requirements**

1. None

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Facility ID: 1677020054 Emissions Unit ID: F021 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Shakeout of castings, particulate emissions (PE) controlled by a fabric filter.	<p>OAC rule 3745-17-07(A)</p> <p>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)</p> <p>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)</p>	<p>Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.</p> <p>Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.</p> <p>The casting shakeout machine 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 good engineering design.</p> <p>The fabric filter 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>2. <b>Additional Terms and Conditions</b></p> <p>(a) The permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.</p>		
<p>B. <b>Operational Restrictions</b></p> <p>1. The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.</p>		
<p>C. <b>Monitoring and/or Record Keeping Requirements</b></p> <p>1. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible emissions of fugitive dust from the emissions unit. The presence or absence of any visible emissions of fugitive dust shall be noted weekly in an operations log. If visible emissions of fugitive dust are observed, the permittee shall also note the following in an operations log:</p> <p style="margin-left: 20px;">a. the color of the emissions;</p> <p style="margin-left: 20px;">b. whether the emissions are representative of normal operations;</p> <p style="margin-left: 20px;">c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;</p> <p style="margin-left: 20px;">d. the total duration of the visible emissions incident; and</p> <p style="margin-left: 20px;">e. any corrective actions taken to minimize or eliminate the visible emissions.</p> <p>2. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible PE from the fabric filter serving this emissions unit. The presence or absence of any visible PE from the fabric filter shall be noted weekly in an operations log. If visible PE are observed from the fabric filter, the permittee shall also note the following in an operations log:</p> <p style="margin-left: 20px;">a. the color of the emissions;</p> <p style="margin-left: 20px;">b. whether the emissions are representative of normal operations;</p> <p style="margin-left: 20px;">c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;</p> <p style="margin-left: 20px;">d. the total duration of the visible emissions incident; and</p> <p style="margin-left: 20px;">e. any corrective actions taken to eliminate the visible emissions.</p> <p>3. The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.</p>		
<p>D. <b>Reporting Requirements</b></p> <p>1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).</p> <p>2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).</p> <p>3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.</p>		
<p>E. <b>Testing Requirements</b></p> <p>1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods: Emission Limitation: 20% opacity as a 6-minute average (stack emissions)</p> <p>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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1). Emission Limitation: 20% opacity as a 3-minute average (fugitive emissions)</p>		

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).  
Emission Limitation: no visible emissions

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).  
Emission Limitation: 0.030 gr/dscf of PE

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

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 1677020054 Emissions Unit ID: P019 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Cleaning of castings, 8 tons/hour maximum process weight rate capacity, particulate emissions (PE) controlled by a fabric filter, 48 pounds/hour of PE uncontrolled mass rate of emission.	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.
	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 emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	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 casting cleaning machine 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 good engineering design.
	OAC rule 3745-17-11(B)	PE shall not exceed 7.04 pounds/hour (stack emissions) (based on OAC rule 3745-17-11 Appendix, Figure II, which is more stringent than Table I).

**2. Additional Terms and Conditions**

- (a) The permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

**B. Operational Restrictions**

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

**C. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow,

for any visible emissions of fugitive dust from the emissions unit. The presence or absence of any visible emissions of fugitive dust shall be noted weekly in an operations log. If visible emissions of fugitive dust are observed, the permittee shall also note the following in an operations log:

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

**D. Reporting Requirements**

1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:  
 Emission Limitation: 20% opacity as a 6-minute average (stack emissions)  
  
 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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).  
 Emission Limitation: 20% opacity as a 3-minute average (fugitive emissions)  
  
 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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).  
 Emission Limitation: PE shall not exceed 7.04 pounds/hour (stack emissions).  
  
 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 methods and procedures specified in OAC rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

1. None

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**Facility ID: 1677020054 Emissions Unit ID: P023 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

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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.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Mold wash operations (typically with isopropyl alcohol); emissions of volatile organic compounds (VOC) uncontrolled.	OAC rule 3745-21-07(G)(9)	Exempt from the provisions of OAC rule 3745-21-07 (G).

**2. Additional Terms and Conditions**

- (a) The permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement, or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

**B. Operational Restrictions**

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

**C. Monitoring and/or Record Keeping Requirements**

1. On any day the permittee employs any photochemically reactive material(s) in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), the following information shall be collected and recorded:
- the company identification of each liquid organic material, excluding non photochemically reactive cleanup materials, employed in the emissions unit during each such day;
  - the total quantity of liquid organic material(s) emitted, in pounds, excluding non photochemically reactive cleanup materials, from the emissions unit during each such day;
  - the actual number of hours of operation of the emissions unit during each such day; and
  - the average hourly rate of liquid organic material(s) emitted, in pounds/hour, excluding non photochemically reactive cleanup materials, from the emissions unit during each such day, i.e.,  $d = b/c$ .

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify the days during which photochemically reactive materials were employed in the emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted in pounds, hourly and daily, during each such day.

The quarterly deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. None

**F. Miscellaneous Requirements**

1. None

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**Part II - Special Terms and Conditions**

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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.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall

not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Cleaning of castings performed in an enclosed blasting cabinet using metal shot, 10 tons/hour design capacity, particulate emissions (PE) controlled by a fabric filter.	OAC rule 3745-31-05(A)(3) (PTI 16-02360)	PE shall not exceed 1.0 pound/hour & 4.4 tons/year (stack emissions).  Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.  Visible emissions of fugitive dust from building ventilation shall not exceed 5% opacity, as a 3-minute average.  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 good engineering design.  The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
	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)	

**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.

However, the permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement, or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

The permittee shall properly install (or have properly installed), adjust, operate, and maintain a fabric filter control system (or comparable air pollution control system), ductwork, fan, and any other equipment necessary to capture, contain, and vent air emissions of particulates to the air pollution control system serving this emissions unit, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.

**B. Operational Restrictions**

- 1. The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.
- 2. Except for an initial operating period after filter media replacement to attain design filtering efficiency, the pressure drop across the fabric filter serving this emissions unit shall be maintained within the range of 1 to 8 inches of water, while the emissions unit is in operation.

**C. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible emissions of fugitive dust from the emissions unit. The presence or absence of any visible emissions of fugitive dust shall be noted weekly in an operations log. If visible emissions of fugitive dust are observed, the permittee shall also note the following in an operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
  - d. the total duration of the visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.
- 2. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible PE from the fabric filter serving this emissions unit. The presence or absence of any visible PE from the fabric filter shall be noted weekly in an operations log. If visible PE are observed from the fabric filter, the permittee shall also note the following in an operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
  - d. the total duration of the visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.
- 3. The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
- 4. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the fabric filter serving this emissions unit, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and

operating manual(s). The permittee shall record the pressure drop across the fabric filter on a weekly basis.

**D. Reporting Requirements**

1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
4. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the fabric filter serving this emissions unit did not comply with the allowable range specified above. These reports are due by the dates described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation: 5% opacity as a 6-minute average (stack emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

Emission Limitation: 5% opacity as a 3-minute average (fugitive emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).

Emission Limitation: PE shall not exceed 1.0 pound/hour & 4.4 tons/year (stack emissions).

Applicable Compliance Method: The above mass particulate emissions limitations are greater than the potential to emit, as demonstrated below:

$H = F(1 - C)$ ; and

$Y = H(8760 \text{ hours/year})(1 \text{ ton}/2000 \text{ pounds})$

Where,

$H = 0.85 \text{ lb/hr of PE [hourly controlled potential stack emissions];}$

$Y = 3.7 \text{ tpy of PE [yearly controlled potential stack emissions];}$

$F = 17 \text{ pounds PE/ton iron cleaned [USEPA AP-42, 5th ed., 1/95, Table 12.10-7]; and}$

$I = 10 \text{ tons iron cleaned/hour [physical/operational design capacity]; and}$

$C = 0.995 \text{ [overall PE control efficiency].}$

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

1. None

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Facility ID: 1677020054 Emissions Unit ID: P909 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the

applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Grinding and cleaning of castings, 4 tons/hour maximum process weight rate capacity, particulate emissions (PE) controlled by a fabric filter, 24 pounds/hour of PE uncontrolled mass rate of emission.	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.
	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 emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	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.
	OAC rule 3745-17-11(B)	PE shall not exceed 4.50 pounds/hour (stack emissions) (based on OAC rule 3745-17-11 Appendix, Figure II, which is more stringent than Table I).

**2. Additional Terms and Conditions**

- (a) The permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

**B. Operational Restrictions**

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

**C. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible emissions of fugitive dust from the emissions unit. The presence or absence of any visible emissions of fugitive dust shall be noted weekly in an operations log. If visible emissions of fugitive dust are observed, the permittee shall also note the following in an operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
  - d. the total duration of the visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.
- 2. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible PE from the fabric filter serving this emissions unit. The presence or absence of any visible PE from the fabric filter shall be noted weekly in an operations log. If visible PE are observed from the fabric filter, the permittee shall also note the following in an operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
  - d. the total duration of the visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.
- 3. The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.

**D. Reporting Requirements**

- 1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
- 2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
- 3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

**E. Testing Requirements**

- 1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:  
Emission Limitation: 20% opacity as a 6-minute average (stack emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).  
Emission Limitation: 20% opacity as a 3-minute average (fugitive emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).  
Emission Limitation: PE shall not exceed 4.50 pounds/hour (stack emissions).

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 methods and procedures specified in OAC rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 1677020054 Emissions Unit ID: P910 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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 (PE) controlled by a fabric filter, 72 pounds/hour of PE uncontrolled mass rate of emission.	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.
	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 emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	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 points of capture to the extent possible with good engineering design.
	OAC rule 3745-17-11(B)	PE shall not exceed 9.14 pounds/hour (stack emissions) (based on OAC rule 3745-17-11 Appendix, Figure II, which is more stringent than Table I).

**2. Additional Terms and Conditions**

- (a) The permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any proposed production modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

**B. Operational Restrictions**

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

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible emissions of fugitive dust from the emissions unit. The presence or absence of any visible emissions of fugitive dust shall be noted weekly in an operations log. If visible emissions of fugitive dust are observed, the permittee shall also note the following in an operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
  - d. the total duration of the visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and weather conditions allow, for any visible PE from the fabric filter serving this emissions unit. The presence or absence of any visible PE from the fabric filter shall be noted weekly in an operations log. If visible PE are observed from the fabric filter, the permittee shall also note the following in an operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
  - d. the total duration of the visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.

**D. Reporting Requirements**

1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation: 20% opacity as a 6-minute average (stack emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

Emission Limitation: 20% opacity as a 3-minute average (fugitive emissions)

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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).

Emission Limitation: PE shall not exceed 9.14 pounds/hour (stack emissions).

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 methods and procedures specified in OAC rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

1. None

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Facility ID: 1677020054 Emissions Unit ID: P913 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Breakdown of sand agglomerates from casting shakeout process, 6 tons/hour maximum process weight rate capacity, particulate emissions (PE) controlled by a fabric filter.	OAC rule 3745-31-05(A)(3) (PTI 16-02022)	PE shall not exceed 5.6 pounds/hour & 24.5 tons/year (stack emissions).
	OAC rule 3745-17-07(A)	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). Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	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 emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	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 material transfer/drop-off points shall be of minimal height, and 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 good engineering design.
	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.
 

However, the permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement, or any proposed modification of equipment, materials processed, or production procedures, or any other change that would increase the potential emissions of any air pollutant.

**B. Operational Restrictions**

1. The permittee shall employ the fabric filter serving this emissions unit at all times the emissions unit is in operation.
2. Except for an initial operating period after filter media replacement to attain design filtering efficiency, the pressure drop across the fabric filter serving this emissions unit shall be maintained within the range of 1 to 8 inches of water, while the emissions unit is in operation.

**C. Monitoring and/or Record Keeping Requirements**

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

- c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
    - d. the total duration of the visible emissions incident; and
    - e. any corrective actions taken to eliminate the visible emissions.
  3. The permittee shall document when the fabric filter serving this emissions unit was not in service when the emissions unit was in operation.
  4. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the fabric filter serving this emissions unit, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a weekly basis.
- D. Reporting Requirements**
1. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible emissions of fugitive dust were observed from the emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible emissions of fugitive dust. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
  2. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible PE were observed from the fabric filter serving this emissions unit and (b) describes the corrective actions taken to eliminate the visible PE. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).
  3. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the fabric filter serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
  4. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the fabric filter serving this emissions unit did not comply with the allowable range specified above. These reports are due by the dates described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
- E. Testing Requirements**
1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:  
Emission Limitation: 20% opacity as a 6-minute average (stack emissions)  
  
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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).  
Emission Limitation: 20% opacity as a 3-minute average (fugitive emissions)  
  
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 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(3).  
Emission Limitation: PE shall not exceed 5.6 pounds/hour & 24.5 tons/year (stack emissions).  
  
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 methods and procedures specified in OAC rule 3745-17-03(B)(10).
- F. Miscellaneous Requirements**
1. None