

Facility ID: 0285020406 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.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 0285020406 Emissions Unit ID: F001 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>  |
|--|---|---|
| F001 - Concrete paver manufacturing plant consisting of cement silo #1 and #2, each controlled by a fabric filter, a mixing operation controlled by a fabric filter, and a uncontrolled tumbler. | OAC rule 3745-31-05(A)(3)<br>(PTI 02-14432) | See sections A.2.a through A.2.e of these terms and conditions.   |
|  | OAC rule 3745-17-08                         | The requirements of this rule are not applicable as the facility is not located in an Appendix A area.    |
|  | OAC rule 3745-17-11(A)(1)(f)                | The requirements of this rule are not applicable as the emissions unit is subject to OAC rule 3745-17-08. |

**2. Additional Terms and Conditions**

- (a) The visible particulate emissions from any building opening shall not exceed 5% opacity, as a 3-minute average.  
 The visible particulate emissions from the cement silo #1 vent shall not exceed 5% opacity, as a 3-minute average.  
 The visible particulate emissions from the cement silo #2 vent shall not exceed 5% opacity, as a 3-minute average.  
 The visible particulate emissions from the cement paver tumbler shall not exceed 5% opacity, as a 3-minute average.  
 Particulate emissions generated by operating this emissions unit shall not exceed 1.13 tons per year.

**B. Operational Restrictions**

1. The cement silo #1 vent and the cement silo #2 vent shall be controlled by fabric filters or similar control devices at all times while the cement silos are loaded or unloaded.
2. The cement mixer shall be controlled by a fabric filter or similar control device at all times while the cement mixer is loaded or in operation.
3. The permittee shall apply water as a dust suppressant to the cement pavers prior to the introduction into the tumbler.

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

1. The permittee shall maintain daily records that document:
  - a. all times when the cement silo #1 vent was not controlled by a fabric filter or similar control device while it was in operation;
  - b. all times when the cement silo #2 vent was not controlled by a fabric filter or similar control device while it was in operation;
  - c. all times when the cement mixer was not controlled by a fabric filter or similar control device while it was in operation; and
  - d. all times when water was not used as a dust suppressant while the tumbler was in operation.

**D. Reporting Requirements**

1. The permittee shall notify the Director (Ohio EPA, Northeast District Office) in writing of any daily record showing that:
  - a. the cement silo #1 vent was not controlled by a fabric filter or similar control device while it was in operation;
  - b. the cement silo #2 vent was not controlled by a fabric filter or similar control device while it was in operation;
  - c. the cement mixer was not controlled by a fabric filter or similar control device while it was in operation; and
  - d. water was not used as a dust suppressant while the tumbler was in operation.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) 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:

Particulate emissions generated by operating this emissions unit shall not exceed 1.13 tons per year.

Applicable Compliance Method:

Compliance shall be determined by the sum of particulate emissions from silo #1, silo #2, sand and gravel bins, weigh bins, mixer and tumbler, and shall be determined according to the sum of the following equations:

Cement silo #1 = (0.24 lb/ton product) (5,880 tons/yr of products) (ton/2,000 lbs) (1 - 99%)

Cement silo #2 = (0.24 lb/ton product) (5,880 tons/yr of products) (ton/2,000 lbs) (1 - 99%)

Sand & Gravel bins = (0.029 lb/ton product) (67,642 tons/yr of products) (ton/2,000 lbs) (1 - 70%)

Weigh hopper = (0.02 lb/ton product) (30 tons/hr of product) (8,760 hrs/yr) (ton/2,000 lbs) (1 - 70%)

Mixer = (0.04 lb/ton mixed) (84,000 tons/yr mixed) (ton/2,000 lbs) (1 - 99%)

Tumbler = (0.00070 lb/ton product) (42,588 tons/yr of products) (ton/2,000 lbs)

where:

0.24 lb/ton product is the emission factor from AP-42, Chapter 11.12 "Concrete Batching" 10/86, cement unloading to elevated storage silo, bucket elevator;

5,880 tons/yr is the maximum concrete loaded into the silo;

99% is the control efficiency of the fabric filter controlling the silo vent;

67,642 tons/year is the maximum sand and gravel loaded into the bins;

0.029 lb/ton product is the emission factor from AP-42, Chapter 11.12 "Concrete batching" 10/86, sand and aggregate transfer to elevated bin;

70% is the control efficiency of a total enclosure without a fabric filter according to RACM table;

0.02 lb/ton product is the emission factor from AP-42, Chapter 11.12 "Concrete Batching" 10/86, weight hopper loading;

30 tons/hr is the maximum process rate of the weigh hopper loading;

84,000 tons per year is the maximum process rate of the mixer;

0.04 lb/ton product is the emission factor from AP-42, Chapter 11.12 "Concrete batching" 10/86, mixer loading;

99% is the control of the fabric filter on the mixer vent;

0.00070 lb/ton is the emission factor from AP-42, Chapter 11.19.2 "Crushed Stone Processing", 1/95, Primary Crushing; and

42,588 tons/yr is the maximum process weight rate of the tumbler.

Emission Limitation:

The visible particulate emissions from any building opening shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

Emission Limitation:

The visible particulate emissions from the cement silo #1 vent shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

Emission Limitation:

The visible particulate emissions from the cement silo #2 vent shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.  
Emission Limitation:

The visible particulate emissions from the cement paver tumbler shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

F. **Miscellaneous Requirements**

1. None