

Facility ID: 0660970004 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: 0660970004 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>
Portable 200 TPH Concrete Batch Plant Including Cement Silo and Fly Ash Silo Controlled with Fabric Filters	OAC rule 3745-31-05(A)(3) PTI #06-6763 Issued 4/11/2002	The fabric filters shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases or there shall be no visible emissions, whichever is less stringent. PE shall not exceed 14.8 tons per year. There shall be no visible fugitive particulate emissions from the batch plant. See A.2.a and b below.
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-07(B)(1) OAC rule 3745-17-08 OAC rule 3745-17-11	The emissions limitations and control requirements specified by these applicable rules are equivalent to or less stringent than the emissions limitations and control requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- (a) The permittee shall employ best available control measures on the concrete batch plant and associated cement silo and fly ash silo for the purpose of ensuring compliance with the above-mentioned applicable requirements for fugitive particulate emissions. In accordance with the permittee's application, the permittee shall maintain enclosures and vent emissions to a fabric filter baghouse and/or filter sock to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional measures to ensure compliance.
Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the exhaust stacks serving this emissions unit and for any visible fugitive particulate emissions from the batch plant egress points. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the exhaust stacks serving this emissions unit and all days during which any

visible fugitive particulate emissions were observed from the batch plant egress points and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible emissions are observed during a given period, the permittee shall submit a report which states that no visible emissions were observed.

E. Testing Requirements

1. Compliance with the emission limitations identified in A.1. above shall be determined in accordance with the following methods:

Emission limitation:

The fabric filters shall achieve an outlet emission rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there shall be no visible emissions, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on emission testing per OAC rule 3745-17-03(B)(7).

If required, compliance with the no visible emission limit from the exhaust of the fabric filters shall be determined using Test Method 22-like visible emissions observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emissions observations.)

Emission Limitation:

PE shall not exceed 14.8 tons per year.

Compliance Determination:

Compliance with the annual emission limitation shall be demonstrated by the following one-time calculation using emission factors from AP-42, Compilation of Air Pollutant Emission Factors, Chapter 11, Table 11.12-2 (issued 10/01).

Average Material composition of Concrete from AP-42: Aggregate - 37%, Sand - 37%, Cement - 13%, Cement Supplement - 2%, and approximately 20 gallons of water.

Aggregate transfer: Total PE = 0.0069 lb/ton of material loaded*

$200 \text{ tons/hr} \times 37\% = 74 \text{ tons/hr} \times 0.0069 \text{ lb/ton} = 0.51 \text{ lb/hr} \times 8760 \text{ hrs/yr} \times 0.0005 \text{ ton/lb} = 2.24 \text{ tons per year}$

Sand Transfer: Total PE = 0.0021 lb/ton of material loaded*

$200 \text{ tons/hr} \times 37\% = 74 \text{ tons/hr} \times 0.0021 \text{ lb/ton} = 0.16 \text{ lb/hr} \times 8760 \text{ hrs/yr} \times 0.0005 \text{ ton/lb} = 0.70 \text{ ton per year}$

*Emission factors take moisture content into consideration

Cement unloading to elevated storage silo: 0.030 gr/dscf

$0.030 \text{ gr/dscf} \times 853 \text{ acfm} \times 60 \text{ mins/hr} \times 1 \text{ lb/7000gr} = 0.22 \text{ lb/hr} \times 8760 \text{ hrs/yr} \times 0.0005 \text{ ton/lb} = 0.96 \text{ ton per year}$

Flyash unloading to elevated storage silo: 0.030 gr/dscf

$0.030 \text{ gr/dscf} \times 853 \text{ acfm} \times 60 \text{ mins/hr} \times 1 \text{ lb/7000 gr} = 0.22 \text{ lb/hr} \times 8760 \text{ hrs/yr} \times 0.0005 \text{ ton/lb} = 0.96 \text{ ton per year}$

Weigh Hopper loading (Sand & Aggregate): 0.0051 lb/ton uncontrolled

$148 \text{ tons/hr} \times 0.0051 \text{ lb/ton} = 0.75 \text{ lb/hr} \times 0.001 \text{ (baghouse efficiency)} = 0.00075 \text{ lb/hr} \times 8760 \text{ hrs/yr} \times 0.0005 \text{ ton/lb} = 0.003 \text{ ton per year}$

Mixer Loading (central mix): 0.011 lb/ton controlled

$200 \text{ tons/hr} \times 0.011 \text{ lb/ton} = 2.2 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times 0.0005 \text{ ton/lb} = 9.64 \text{ tons per year}$

Total PE = 14.51 tons per year

Emission Limitation:

There shall be no visible fugitive particulate emissions from the batch plant.

Applicable Compliance Method:

If required, compliance with the emission limitation shall be determined using Test Method 22.

F. Miscellaneous Requirements

1. Pursuant to Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria are met:

a. the portable emissions unit is equipped with the best available control technology for such portable emissions unit;

b. the portable emissions unit is operating pursuant to a currently effective permit to install, permit to operate or registration;

c. the applicant has provided proper notice of intent to relocate the portable emissions unit to the Southeast District Office (SEDO) and the appropriate field office having jurisdiction over the new site within a minimum of thirty days prior to the scheduled relocation; and,

d. in the SEDO's and the appropriate field office's judgement, the proposed site is acceptable under the rule

3745-15-07 of the Administrative Code.

2. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria of OAC rule 3745-31-05(F) are met:
 - a. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
 - b. the portable emissions unit is equipped with best available technology;
 - c. the portable emission unit owner has identified the proposed site to Ohio EPA;
 - d. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - e. a public notice, consistent with Chapter 3745-47 of the Administrative Code, is published in the county where the proposed site is located;
 - f. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to the proposed site; and,
 - g. the portable emissions unit owner has provided the Ohio EPA with fifteen days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to this section, shall be valid for no longer than three years and are subject to renewal.
3. In order for the SEDO and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the owner or operator of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the SEDO (2195 Front Street, Logan, Ohio 43138) and the appropriate office having jurisdiction over the new site. Upon receipt of the notice, the SEDO and/or the appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.
4. The permittee should be advised that when portable emission units are located at a stationary source or at a source comprised of portable emission units, potential emissions from the portable emission units are included in the facility potential to emit calculations for Title V and PSD applicability.

The permittee shall include a potential to emit analysis of facility-wide emissions (including the portable sources) for the proposed relocation in the "Notice of Intent to Relocate".