

Facility ID: 0812700427 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.

[Go to Part II for Emissions Unit F001](#)
[Go to Part II for Emissions Unit P901](#)

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

Facility ID: 0812700427 Emissions Unit ID: F001 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

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 - Plant Roadways and Parking Areas	OAC rule 3745-31-05(A)(3) PTI 08-04618	The particulate emissions from paved roadways and parking areas shall not exceed 0.6 tons/year (see A.2.a below). The particulate emissions from unpaved roadways and parking areas shall not exceed 2.8 tons/year (see A.2.a below).
Paved roadways and parking areas (see A.2.b below)	OAC rule 3745-31-05(A)(3)	The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d, and A.2.f through A.2.j)
Unpaved roadways and parking areas (see A.2.c below)	OAC rule 3745-31-05(A)(3)	The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j)

2. Additional Terms and Conditions

- (a) The annual emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these terms.
 The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

 paved roadways:

 All paved roadways

 paved parking areas:

 All paved parking areas
 The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

 unpaved roadways:

 All unpaved roadways

 unpaved parking areas:

 All unpaved parking areas
 The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water at sufficient treatment frequencies to ensure compliance and vehicle speed reduction. Nothing in this paragraph shall prohibit the permittee from

employing other control measures to ensure compliance.

The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water or other non-toxic dust suppressants at sufficient treatment frequencies to ensure compliance and vehicle speed reduction. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

Any unpaved roadway or parking area, which is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure (s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

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. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas minimum inspection frequency

All Daily

unpaved roadways and parking areas minimum inspection frequency

All Daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which any abnormal visible fugitive particulate emissions were observed; and
 - b. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

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

Emission Limitation:
0.6 tons/year particulate emissions from paved roadways and parking areas.

Applicable Compliance Method:
Compliance shall be determined by multiplying the emission factor of 7.57 lbs PE/vehicle mile traveled (Equation 1 from AP-42, Section 13.2.1, (12/03)) by the maximum vehicle miles traveled (3,500 vehicle) and by a control factor of $((100 - 96) / 100)$ where 96 is the control efficiency based on speed reduction (80%) and water flushing (80%) of paved roads from Reasonably Available Control Measures For Fugitive Dust Sources, (RACM, 1980, Ohio EPA).
Emission Limitation:
2.8 tons/year particulate emissions from unpaved roadways and parking areas.

Applicable Compliance Method:
Compliance shall be determined by multiplying the emission factor of 6.22 lbs PE/vehicle mile traveled (Equation 1a from AP-42, Section 13.2.2, (12/03)) by the maximum vehicle miles traveled (8,750 vehicle) and by a control factor of $((100 - 90) / 100)$ where 90 is the control efficiency based on speed reduction (80%) and watering (50%) of unpaved roads from Reasonably Available Control Measures For Fugitive Dust Sources, (RACM, 1980, Ohio EPA).

F. Miscellaneous Requirements

1. None

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

Facility ID: 0812700427 Emissions Unit ID: P901 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

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>
P901 - Central Mix Concrete Batching Plant 14	OAC rule 3745-31-05(A)(3) PTI 08-04618	The particulate emissions (PE) from this emissions unit shall not exceed 8.8 lbs/hr and 9.7 tons per year (TPY). There shall be no visible emissions or not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases from each fabric filter outlet, whichever is less stringent.
Transfer of sand and aggregate to elevated bins	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(B) OAC rule 3745-17-08	The sand and aggregate loaded into the elevated bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from the conveyor and transfer point to bins. See Section A.2.b. See Section A.2.b.
Cement silo vents with fabric filters	OAC rule 3745-31-05(A)(3)	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 from the outlet, whichever is less stringent. Visible emissions shall not exceed 20 percent opacity as a 6-minute average.

- | | | |
|---|--|--|
| | OAC rule 3745-17-07(A) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| Weigh hopper loading of cement, sand and aggregate with fabric filter | OAC rule 3745-17-11
OAC rule 3745-31-05(A)(3) | The weigh hopper shall be adequately enclosed and vented to a fabric filter, the enclosure shall be sufficient to eliminate visible emissions of fugitive dust at point of capture.

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 from the outlet, whichever is less stringent.

Visible emissions shall not exceed 20 percent opacity as a 6-minute average.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07(A) | |
| Central mixer drum loading of cement, sand and aggregate with fabric filter | OAC rule 3745-17-11
OAC rule 3745-31-05(A)(3) | The mixer loading of cement, sand, and aggregate shall be adequately enclosed and vented to a fabric filter, the enclosure shall be sufficient to eliminate visible emissions of fugitive dust at point of capture.

The fabric filter 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 from the outlet, whichever is less stringent.

Visible emissions shall not exceed 20 percent opacity as a 6-minute average.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07(A) | |
| | OAC rule 3745-17-11 | |
2. **Additional Terms and Conditions**
- (a) The 8.8 lbs/hr limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
The emissions unit is not located in an Appendix A area as specified in OAC rule 3745-17-08. Therefore this emissions unit is not subject to the RACM requirements established in OAC rule 3745-17-08(B) and the visible emissions limitations in OAC rule 3745-17-07(B).
- 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 stack and for any visible fugitive particulate emissions from the egress points (i.e., emissions capture systems, 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:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the abnormal 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 daily 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.

2. The permittee shall maintain records of the following information for this emissions unit:
 - a. the annual concrete production rate, in cubic yards; and
 - b. the annual particulate emission rate, in tons (as calculated in Section E.1.b.).

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any visible particulate emissions were observed in excess of the allowable opacity limit specified above from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed in excess of the allowable opacity limit specified above from the egress points (i.e., emissions capture systems, building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the abnormal visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) for this emissions unit that specify:
 - a. The total annual concrete production, in cubic yards.
 - b. The total particulate emissions, in tons.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the specified emission limitations in Section A.1. of this permit shall be demonstrated in accordance with the following methods:

Emission Limitation -
8.8 lbs/hr PE

Applicable Compliance Method -
Compliance shall be determined by totaling the following products:

 - i. Sand and aggregate transfer to elevated bins:

The maximum process rate of 250 cubic yards of concrete multiplied by three (number of transfer operations) and by the sum of by 0.0015 lb PE/cubic yard of concrete for sand transfer and 0.0064 lb PE/cubic yard of concrete for aggregate transfer (AP-42,Chapter 11, Table 11.12-4 (10/01)) for an uncontrolled emission rate of 5.93 lbs/hr.
 - ii. Cement unloading to elevated silo (pneumatic):

The maximum process rate of 250 cubic yards of concrete multiplied by the emission factor of 0.0002 lb PE/cubic yard of concrete for pneumatic cement delivery to silo (AP-42,Chapter 11, Table 11.12-4 (10/01)) for an uncontrolled emission rate of 0.050 lb/hr.
 - iii. Fly ash and cement supplement unloading to elevated silo (pneumatic):

The maximum process rate of 250 cubic yards of concrete multiplied by the emission factor of 0.0003 lb PE/cubic yard of concrete for pneumatic cement supplement delivery to silo (AP-42,Chapter 11, Table 11.12-4 (10/01)) for an uncontrolled emission rate of 0.075 lb/hr.
 - iv. Weigh hopper loading:

The maximum process rate of 250 cubic yards of concrete multiplied by the emission factor of 0.0079 lb PE/cubic yard of concrete for weigh hopper loading (AP-42,Chapter 11, Table 11.12-4 (10/01)) for an uncontrolled emission rate of 1.98 lbs/hr.
 - v. Central mix loading:

The maximum process rate of 250 cubic yards of concrete multiplied by the emission factor of 0.0031 lb PE/cubic yard of concrete for central mix loading (AP-42,Chapter 11, Table 11.12-4 (10/01)) for an uncontrolled emission rate of 0.78 lbs/hr.

Emission Limitation -
9.7 TPY particulate emissions

Applicable Compliance Method -
The 9.7 TPY particulate emissions limitation was developed by multiplying the maximum annual production rate, 550,000 cubic yards of concrete per year by the emission factor of 0.035 lb PE/cubic yard of concrete. Therefore, compliance shall be based upon the record keeping requirements specified in Section C.2.a. of this permit, multiplied by the emission factor of 0.035 lb PE/cubic yard of concrete, divided by 2000 lbs/ton.

Emission Limitation -
0.030 gr/dscf

Applicable Compliance Method-
If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

Emission Limitation -
Visible fugitive PE emissions shall not exceed 20 percent opacity as a 3-minute average

Applicable Compliance Method -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-

17-03(B)(3) using the methods and procedures specified in USEPA Reference Method 9.

Emission Limitation -
No visible emissions

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures specified in USEPA Reference Method 22.

F. **Miscellaneous Requirements**

1. None