



State of Ohio Environmental Protection Agency

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Columbus, Ohio 43215

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P.O. Box 1049
Columbus, OH 43216-1049

2/12/2009

Steven Wagener
KUHLMAN CORPORATION
1845 INDIANWOOD CIRCLE
MAUMEE, OH 43537

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0448970001
Permit Number: P0104385
Permit Type: Renewal
County: Lucas

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

If you have any questions regarding this permit, please contact the Toledo Department of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

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

Cc: TDES

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Air Pollution Permit-to-Install and Operate
for
KUHLMAN CORPORATION**

Facility ID: 0448970001
Permit Number: P0104385
Permit Type: Renewal
Issued: 2/12/2009
Effective: 2/12/2009
Expiration: 2/12/2019



Air Pollution Permit-to-Install and Operate
for
KUHLMAN CORPORATION

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate
Permit Number: P0104385
Facility ID: 0448970001
Effective Date: 2/12/2009

Authorization

Facility ID: 0448970001
Application Number(s): A0036809
Permit Number: P0104385
Permit Description: Portable concrete plant issued a PTI in 2005 that was never issued a PTO. This PTIO serves as a first-issue PTO.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 2/12/2009
Effective Date: 2/12/2009
Expiration Date: 2/12/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15
This document constitutes issuance to:

KUHLMAN CORPORATION
444 KUHLMAN DRIVE
TOLEDO, OH 43609

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

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

Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419)936-3015

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0104385
Permit Description: Portable concrete plant issued a PTI in 2005 that was never issued a PTO. This PTIO serves as a first-issue PTO.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

- Emissions Unit ID:** F001
Company Equipment ID: F001
Superseded Permit Number:
General Permit Category and Type: Not Applicable
- Emissions Unit ID:** F002
Company Equipment ID: F002
Superseded Permit Number:
General Permit Category and Type: Not Applicable
- Emissions Unit ID:** F003
Company Equipment ID: F003
Superseded Permit Number:
General Permit Category and Type: Not Applicable
- Emissions Unit ID:** F004
Company Equipment ID: F004
Superseded Permit Number:
General Permit Category and Type: Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.



If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Toledo Department of Environmental Services in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

C. Emissions Unit Terms and Conditions



1. F001, F001

Operations, Property and/or Equipment Description:

portable plant seven, 160 cu yd/hr portable trans-mix concrete plant:

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b., b)(1)f., c)(1), d)(1), e)(1), f)(1)c., f)(1)e., f)(1)g., f)(1)i.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
loading of the trans-mix trucks		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 9.28 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 2.56 pounds per hour. Visible emissions of fugitive dust shall not exceed 10% opacity as a three-minute average. See b)(2)a. through c.
b.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 2.18 tons of PE per rolling, 12-month period. The emissions of fugitive PM10 shall not exceed 0.6 ton per rolling, 12-month period. See b)(2)d.
c.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
d.	OAC rule 3745-17-08(B), (B)(3)	See b)(2)e.
loading of the weigh hopper		



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-31-05(A)(3) (PTI 04-01405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour. Visible emissions of fugitive dust shall not exceed 10% opacity as a three-minute average. See b)(2)b., b)(2)c. and b)(2)f.
f.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period. The emissions of fugitive PM10 shall not exceed 0.14 ton per rolling, 12-month period. See b)(2)d.
g.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
h.	OAC rule 3745-17-08(B), (B)(3)	See b)(2)e.

(2) Additional Terms and Conditions

- a. The permittee shall employ the following best available control measures for the transit-mix truck loading process for the purpose of ensuring compliance with the above-mentioned applicable requirements:

The permittee shall install and employ a water spray system to maintain adequate moisture in the feed stock. A choke feed fill system shall be utilized for the purpose of controlling fugitive dust emissions from the truck loading process. These control systems shall be operated at all times that trucks are being loaded and these controls shall be sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The hourly particulate emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to be maintained to demonstrate compliance with these limitations.
- c. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
- d. The rolling, 12-month particulate emission limitations specified above are based upon the emissions unit's potential to emit at a rolling, 12-month production restriction of 75,000 cubic yards of concrete. Therefore, no annual emission records are required to be maintained for this emissions unit to demonstrate compliance with these limitations.



- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- f. The permittee shall employ the following best available control measures for the weigh hopper for the purpose of ensuring compliance with the above-mentioned applicable requirements:

The permittee shall install and employ a water spray system to maintain adequate moisture in the feed stock. The weigh hoppers shall be sufficiently enclosed so as to minimize or eliminate at all times visible emissions of fugitive dust. These control systems shall be operated at all times that the weigh hopper is being loaded and these controls shall be sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c) Operational Restrictions

- (1) The maximum throughput for this emissions unit shall not exceed 75,000 cubic yards of concrete, based upon a rolling, 12-month summation of the concrete production. Compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the concrete production.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
 - a. the volume of concrete produced in this emissions unit for each month, in cubic yards; and
 - b. the rolling, 12-month summation of the concrete production.
- (2) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible fugitive particulate emissions from the weigh hopper. 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.
- (3) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible fugitive particulate emissions from the area immediately above the loading truck. 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.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any exceedances of the rolling 12-month concrete production limitation; and

ii. (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a quarterly calendar period, the permittee shall submit a report that states that no deviations (excursions) occurred during the reporting period.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering July to December) and July 31 (covering January to June), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 10% opacity as a three-minute average.



Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

The emissions of fugitive dust shall not exceed 9.28 pounds of PE per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0568 lb PE/cu yd) as follows:

$$(160 \text{ cu yd/hr})(0.0568 \text{ lb PE/cu yd}) = 9.09 \text{ lb PE/hr}$$

c. Emission Limitation:

The emissions of fugitive dust shall not exceed 2.18 tons of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0568 lb PE/cu yd) as follows:

$$(75,000 \text{ cu yd/yr})(0.0568 \text{ lb PE/cu yd})(1 \text{ t}/2000 \text{ lb}) = 2.13 \text{ t PE/yr}$$

d. Emission Limitation:

The emissions of fugitive dust shall not exceed 2.56 pounds of PM10 per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.016 lb PM10/cu yd) as follows:

$$(160 \text{ cu yd/hr})(0.016 \text{ lb PM10/cu yd}) = 2.53 \text{ lb PM10/hr}$$

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.60 ton of PM10 per rolling, 12-month period.



Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.014 lb PM10/cu yd) as follows:

$$(75,000 \text{ cu yd/yr})(0.016 \text{ lb PM10/cu yd})(1 \text{ t}/2000 \text{ lb}) = 0.60 \text{ tPM10/yr}$$

f. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.26 pounds of PE per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0079 lb PE/cu yd) as follows:

$$(160 \text{ cu yd/hr})(0.0079 \text{ lb PE/cu yd}) = 1.26 \text{ lb PE/hr}$$

g. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0079 lb PE/cu yd) as follows:

$$(75,000 \text{ cu yd/yr})(0.0079 \text{ lb PE/cu yd})(1 \text{ t}/2000 \text{ lb}) = 0.30 \text{ t PE/yr}$$

h. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.61 pound of PM10 per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0038 lb PM10/cu yd) as follows:

$$(160 \text{ cu yd/hr})(0.0038 \text{ lb PM10/cu yd}) = 0.61 \text{ lb PM10/hr}$$

i. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.14 ton of PM10 per rolling, 12-month period.



Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0038 lb PM10/cu yd) as follows:

$$(75,000 \text{ cu yd/yr})(0.0038 \text{ lb PM10/cu yd})(1 \text{ t}/2000 \text{ lb}) = 0.14 \text{ t PM10/yr}$$

g) Miscellaneous Requirements

- (1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a Notice of Site Approval if the following criteria is met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):
 - a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
 - b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
 - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
 - d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
 - e. the Director has issued a Notice of Site Approval, stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's Notice of Site Approval for the site.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.



2. F002, F002

Operations, Property and/or Equipment Description:

portable plant seven, 160 cu yd/hr portable trans-mix concrete plant: sand and aggregate storage piles.

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

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

a. None.

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

a. b)(1)b., b)(1)f., b)(1)j., b)(1)n., f)(1)c., f)(1)e., f)(1)g.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	load-in	
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour. There shall be no visible emissions of fugitive dust except for a period of time not to exceed 1 minute in any 60-minute observation period. See b)(2)a., b)(2)c., b)(2)d., and b)(2)e.
b.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.15 ton per rolling, 12-month period. See b)(2)f.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(B)(1/)	See b)(2)g.
d.	OAC rules 3745-17-08(B), (B)(3), (B)(6), (B)(7)	See b)(2)g.
load-out		
e.	OAC rule 3745-31-05(A)(3)(a)(ii) (PTI 04-01405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour. There shall be no visible emissions of fugitive dust except for a period of time not to exceed 1 minute in any 60-minute observation period. See b)(2)a., b)(2)c., b)(2)d., and b)(2)e.
f.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.15 ton per rolling, 12-month period. See b)(2)f.
g.	OAC rule 3745-17-07(B)(1)	See b)(2)g.
h.	OAC rules 3745-17-08(B), (B)(3), (B)(6), (B)(7)	See b)(2)g.
front end loader		
i.	OAC rule 3745-31-05(A)(3)(a)(ii) (PTI 04-01405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 1.38 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.38 pound per hour. There shall be no visible emissions of fugitive dust except for a period of time not to exceed 3 minutes in any 60-minute observation period. See b)(2)a., b)(2)c., b)(2)d., and b)(2)e.
j.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 0.32 ton of PE per rolling, 12-month period. The emissions of fugitive PM10 shall not exceed 0.09 ton per rolling, 12-month period. See b)(2)f.
k.	OAC rules 3745-17-07(B)(1), (B)(5)	See b)(2)g.
l.	OAC rules 3745-17-08(B), (B)(2)	See b)(2)g.
wind erosion		



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
m.	OAC rule 3745-31-05(A)(3)(a)(ii) (PTI 04-01405, modified 7/19/2005)	There shall be no visible emissions of fugitive dust except for a period of time not to exceed 1 minute in any 60-minute observation period. See b)(2)a. through e.
n.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 1.07 tons of PE per rolling, 12-month period. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.43 ton per rolling, 12-month period. See b)(2)f.
o.	OAC rule 3745-17-07(B)(6)	See b)(2)g.
p.	OAC rules 3745-17-08(B), (B)(6)	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee shall employ the following best available control measures for the processes comprising this emissions unit for the purpose of ensuring compliance with the above-mentioned applicable requirements:

The permittee shall install and employ a water spray system to maintain adequate moisture in the materials being handled and stored. These control systems shall be operated at all times that the associated process is in operation and these controls shall be sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.
- c. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.
- d. The hourly particulate emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to be maintained to demonstrate compliance with these limitations.
- e. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).



- f. The rolling, 12-month particulate emission limitations specified above are based upon the emissions unit's potential to emit at a rolling, 12-month production restriction of 75,000 cubic yards of concrete made enforceable in the associated emissions unit, F001. Therefore, no emission records are required to be maintained for this emissions unit to demonstrate compliance with these limitations.
 - g. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as otherwise provided in this section, the permittee shall perform daily inspections of each of the above-identified processes at each storage pile.
 - (2) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
 - (3) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit. The inspections shall be performed during representative, normal storage pile operating conditions.
 - (4) 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.
 - (5) 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, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in (5)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, (iii) front end loader operation and (iv) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.



e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

There shall be no visible emissions of fugitive dust except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

b. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a onetime emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0064 lb PE/cu yd for aggregate and 0.0015 lb PE/cu yd for sand) as follows:

$$(160 \text{ cu yd/hr})(0.0064 + 0.0015 \text{ lb PE/cu yd}) = 1.26 \text{ lb PE/hr}$$

c. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors,



Section 11.12, Table 11.12-5, dated 6/2006, (0.0064 lb PE/cu yd for aggregate and 0.0015 lb PE/cu yd for sand) as follows:

$$(75,000 \text{ cu yd/yr})(0.0064 + 0.0015 \text{ lb PE/cu yd}) \div (2000 \text{ lb /t}) = 0.30 \text{ t PE/yr}$$

d. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.61 pound of PM10 per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0031 lb PM10/cu yd for aggregate and 0.0007 lb PM10/cu yd for sand) as follows:

$$(160 \text{ cu yd/hr})(0.0031 + 0.0007 \text{ lb PM10/cu yd}) = 0.61 \text{ lb PM10/hr}$$

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.15 ton of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0031 lb PM10/cu yd for aggregate and 0.0007 lb PM10/cu yd for sand) as follows:

$$(75,000 \text{ cu yd/yr})(0.0031 + 0.0007 \text{ lb PM10/cu yd}) \div (2000 \text{ lb /t}) = 0.15 \text{ tPM10/yr}$$

f. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.38 pounds of particulate emissions (PE) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd), 75% control efficiency for adequate moisture and the emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.2,2, Equation 1a, dated 12/03 as follows:

$$E = [k(s/12)^a (W/3)^b] = 8.11 \text{ lb PE/VMT}$$

Where:

E = emission factor, pounds per vehicle mile traveled (lb/VMT)



$$k = 4.9 \text{ for PE}$$

$$a = 0.7 \text{ for PE}$$

$$b = 0.45$$

$$s = \text{surface material silt content} = 7.1 \text{ (Table 13.2.2-2)}$$

$$W = \text{average vehicle weight (20.8 tons per Kuhlman)}$$

Given 160 yard per hour of concrete production, sand and aggregate to comprise 90% of the concrete by volume, a four yard bucket and 100 feet round trip:

$$\text{VMT/hr} = 100 \text{ ft/load (1 mi/5280 ft)}(160 \text{ yd concrete/hr})(0.9 \text{ yd/yd concrete})(1 \text{ load/4 yd})$$

$$\text{VMT/hr} = 0.68 \text{ mi/hr}$$

Then with 75% effective control by watering:

$$\text{Emissions} = (8.11 \text{ lb PE/VMT})(0.68 \text{ mi/hr})(1 - 0.75) = 1.38 \text{ lb PE/hr}$$

g. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.32 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the hourly emission factor calculated above:

$$\text{Emissions} = 1.38 \text{ lb/hr (75000 yd/yr)}(1 \text{ hr/160 yd})(1 \text{ t/2000 lb}) = 0.32 \text{ t PE/yr}$$

h. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.38 pound of PM10 per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd), 75% control efficiency for adequate moisture and the emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.2.2, Equation 1a, dated 12/03 as follows:

$$E = k(s/12)^a (W/3)^b = 2.24 \text{ lb PM10/VMT}$$

Where:

E = emission factor, pounds per vehicle mile traveled (lb/VMT)

$$k = 1.5 \text{ for PM10}$$



a = 0.9 for PM10

b = 0.45

s = surface material silt content = 7.1 (Table 13.2.2-2)

W = average vehicle weight (20.8 tons per Kuhlman)

Given 160 yard per hour of concrete production, sand and aggregate to comprise 90% of the concrete by volume, a four yard bucket and 100 feet round trip:

$$\text{VMT/hr} = 100 \text{ ft/load} (1 \text{ mi}/5280 \text{ ft})(160 \text{ yd concrete/hr})(0.9 \text{ yd/yd concrete})(1 \text{ load}/4 \text{ yd})$$

$$\text{VMT/hr} = 0.68 \text{ mi/hr}$$

Then with 75% effective control by watering:

$$\text{Emissions} = (2.24 \text{ lb PE/VMT})(0.68 \text{ mi/hr})(1 - 0.75) = 0.38 \text{ lb PM10/hr}$$

i. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.09 ton of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the hourly emission factor calculated above:

$$\text{Emissions} = 0.38 \text{ lb/hr} (75000 \text{ yd/yr})(1 \text{ hr}/160 \text{ yd})(1 \text{ t}/2000 \text{ lb}) = 0.09 \text{ t PM10/yr}$$

j. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.73 tons of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing a storage area of 0.25 acre each of sand and gravel, a throughput rate 75,000 cubic yards of concrete per rolling, 12-month period, 75% control efficiency for adequate moisture and the emissions factor calculated by USEPA RACM Guide, Section 2.2.1, dated 9/80, as follows:

$$E = 0.05 (S/1.5)(D/90)(d/235)(f/15)$$

where:

E = PE emission factor (lb /ton)

S = silt content = 2% aggregate & 10% sand (Table 2.1.2-2)



D = duration of storage

d = dry days per year = 229 days (Figure 2.1.2-2)

f = percentage of time wind speed exceeds 12 mph = 20%

the storage piles are estimated at an individual maximum 0.25 acre x 9 feet in height = 90,000 cu ft. At a density of 100 lb /cu ft for sand and 90 lb /cu ft for limestone, and a formula weight for 75,000 yd/yr of concrete of 1865 lb aggregate and 1428 lb sand per yard:

usage = 75,000 yd concrete/yr (1865 lb aggregate/yd concrete)(1 cu ft/90 lb aggregate) = 1,550,000 cu ft aggregate/yr

Daggregate = 365 days ÷ (1,550,000 cu ft)(1 turnover/90000 cu ft) = 21 days for aggregate

usage = 75,000 yd concrete/yr (1428 lb sand/yd concrete)(1 cu ft/100 lb sand) = 1,070,000 cu ft sand/yr

Dsand = 365 days ÷ (1,070,000 cu ft)(1 turnover/90000 cu ft) = 30 days for sand

then:

Eaggregate = 0.05 (10/1.5)(21/90)(229/235)(20/15) = 0.101 lb /t

Esand = 0.05 (2/1.5)(30/90)(229/235)(20/15) = 0.029 lb /t

and for a control efficiency of 75%:

Emissions = 1-0.75)[(0.101 lb /t)(75,000 yd concrete/yr)(1865 lb aggregate/yd concrete) + (0.029 lb /t)(75,000 yd concrete/yr)(1428 lb sand/yd concrete)] (1/2000 lb)²

Emissions = 1.07 t PE/yr

k. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.43 ton of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by one-time emissions calculation utilizing the allowable PE emission factor calculated above, adjusted to PM10 as 40% of the mass of PE (RACM guide, Table 2.1.2-6):

Emissions = 1.07 t PE/yr (0.40 t PM10/t PE) = 0.43 tPM10/yr

g) Miscellaneous Requirements

- (1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the



appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a [Notice of Site Approval](#) if the following criteria is met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):

- a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
- b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
- c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
- d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
- e. the Director has issued a [Notice of Site Approval](#), stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's [Notice of Site Approval](#) for the site.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.



3. F003, F003

Operations, Property and/or Equipment Description:

F003 - portable plant seven, 160 cu yd/hr portable trans-mix concrete plant: material handling: transfer of sand and aggregate to bins and pneumatic conveying of cement to the storage silo

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

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

a. None.

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

a. b)(1)b., b)(1)f., f)(1)d., f)(1)f., f)(1)h., f)(1)j.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	transfer of sand and aggregate to bins	
a.	OAC rule 3745-31-05(A)(3) (PTI 04-1405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour. Visible emissions of fugitive dust shall not exceed 10% opacity as a three-minute average. See b)(2)a. and b)(2)c. through e.
b.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period. The emissions of fugitive PM10 shall not exceed 0.15 ton per rolling, 12-month period. See b)(2)f.
c.	OAC rule 3745-17-07(B)(1)	See b)(2)g.
d.	OAC rule 3745-17-08(B), (B)(3)	See b)(2)g.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	pneumatic conveying of cement to the storage silo with a fabric filter	
e.	OAC rule 3745-31-05(A)(3) (PTI 04-01405, modified 7/19/2005)	The particulate emissions (PE) from the baghouse stack shall not exceed 0.03 pounds per hour. The emissions of particulate from the baghouse stack equal to or less than 10 microns in diameter (PM10) shall not exceed 0.02 pound per hour Visible emissions of fugitive dust shall not exceed 10% opacity as a three-minute average. Visible emissions of particulate from the baghouse filter stack shall not exceed 10% opacity as a six-minute average. See b)(2)b. through e.
f.	OAC rule 3745-31-05(D)	The particulate emissions (PE) from the baghouse stack shall not exceed 0.01 ton per rolling, 12-month period. The emissions of particulate from the baghouse stack equal to or less than 10 microns in diameter (PM10) shall not exceed 0.01 ton per rolling, 12-month period. See b)(2)f.
g.	OAC rule 3745-17-07(B)(1)	See b)(2)g.
h.	OAC rule 3745-17-08(B), (B)(3)	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee shall employ the following best available control measures for the transfer process of sand and aggregate to the elevated storage bins for the purpose of ensuring compliance with the associated applicable requirements:

The permittee shall install and employ water spray systems to maintain adequate moisture in the materials being handled. These control systems shall be operated at all times that the transfer process is in operation and these controls shall be sufficient to minimize or eliminate visible emissions of fugitive dust from the transfer of sand and aggregate to the elevated storage bins. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The permittee shall employ the following best available control measures for the pneumatic conveying process for the purpose of ensuring compliance with the above-mentioned applicable requirements:

The permittee shall install and employ a dust collection system equipped with a fabric filter. This control system shall be operated at all times that the associated process is in operation and this control shall be sufficient to minimize or eliminate



visible emissions of fugitive dust from the pneumatic conveying of cement to the storage silo. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.
- d. The hourly particulate emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to be maintained to demonstrate compliance with these limitations.
- e. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
- f. The rolling, 12-month particulate emission limitations specified above are based upon the emissions unit's potential to emit at a rolling, 12-month production restriction of 75,000 cubic yards of concrete made enforceable in the associated emissions unit, F001. Therefore, no emission records are required to be maintained for this emissions unit to demonstrate compliance with these limitations.
- g. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the associated process is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack and for any visible fugitive particulate emissions from the pneumatic conveying of cement or the transfer of sand and aggregate to the elevated bins. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the 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.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 10% opacity as a three-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Visible emissions of particulate from the baghouse filter stack shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions



factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0064 lb PE/cu yd for aggregate and 0.0015 lb PE/cu yd for sand) as follows:

$$(160 \text{ cu yd/hr})(0.0064 + 0.0015 \text{ lb PE/cu yd}) = 1.26 \text{ lb PE/hr}$$

d. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.30 ton of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0064 lb PE/cu yd for aggregate and 0.0015 lb PE/cu yd for sand) as follows:

$$(75,000 \text{ cu yd/yr})(0.0064 + 0.0015 \text{ lb PE/cu yd}) \div (2000 \text{ lb /t}) = 0.30 \text{ t PE/yr}$$

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.61 pound of PM10 per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0031 lb PM10/cu yd for aggregate and 0.0007 lb PM10/cu yd for sand) as follows:

$$(160 \text{ cu yd/hr})(0.0031 + 0.0007 \text{ lb PM10/cu yd}) = 0.61 \text{ lb PM10/hr}$$

f. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.15 ton of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0031 lb PM10/cu yd for aggregate and 0.0007 lb PM10/cu yd for sand) as follows:

$$(75,000 \text{ cu yd/yr})(0.0031 + 0.0007 \text{ lb PM10/cu yd}) \div (2000 \text{ lb /t}) = 0.15 \text{ tPM10/yr}$$



g. Emission Limitation:

The particulate emissions (PE) from the baghouse stack shall not exceed 0.03 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0002 lb PE/cu yd) as follows:

$$(160 \text{ cu yd/hr})(0.0002 \text{ lb PE/cu yd}) = 0.03 \text{ lb PE/hr}$$

h. Emission Limitation:

The particulate emissions (PE) from the baghouse stack shall not exceed 0.01 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0002 lb PE/cu yd) as follows:

$$(75,000 \text{ cu yd/yr})(0.0002 \text{ lb PE/cu yd}) \div (2000 \text{ lb/t}) = 0.01 \text{ t PE/yr}$$

i. Emission Limitation:

The emissions of PM10 from the baghouse stack shall not exceed 0.02 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum hourly throughput rate (160 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0001 lb PM10/cu yd) as follows:

$$(160 \text{ cu yd/hr})(0.0001 \text{ lb PM10/cu yd}) = 0.02 \text{ lb PM10/hr}$$

j. Emission Limitation:

The emissions of PM10 from the baghouse stack shall not exceed 0.01 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-5, dated 6/2006, (0.0001 lb PM10/cu yd) as follows:



$$(75,000 \text{ cu yd/yr})(0.0001 \text{ lb PM}_{10}/\text{cu yd}) \div (2000 \text{ lb/t}) = 0.01 \text{ tPM}_{10}/\text{yr}$$

g) Miscellaneous Requirements

(1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a Notice of Site Approval if the following criteria is met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):

- a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
- b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
- c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
- d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
- e. the Director has issued a Notice of Site Approval, stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's Notice of Site Approval for the site.

(2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104385

Facility ID: 0448970001

Effective Date: 2/12/2009

of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.



4. F004, F004

Operations, Property and/or Equipment Description:

F004 - portable plant seven, 160 cu yd/hr portable trans-mix concrete plant: unpaved roadways and parking lots

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

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

a. None.

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

a. b)(1)b., f)(1)c., f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01405, modified 7/19/2005)	The emissions of fugitive dust shall not exceed 6.00 pounds of particulate emissions (PE) per hour. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 1.53 pounds per hour. There shall be no visible emissions of fugitive dust except for a period of time not to exceed 3 minute in any 60-minute observation period. See b)(2)a. thru h.
b.	OAC rule 3745-31-05(D)	The emissions of fugitive dust shall not exceed 1.41 tons of PE per rolling, 12-month period. The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.36 ton per rolling, 12-month period. See b)(2)i.
c.	OAC rule 3745-17-07(B)(1), (B)(5)	See b)(2)j.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B), (B)(2), (B)(7), (B)(8), (B)(9)	See b)(2)j.

(2) Additional Terms and Conditions

- a. 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 at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. 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 an 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.
- c. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using sweeping or watering. 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 a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
- d. 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.
- e. 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.
- f. 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.
- g. The hourly particulate emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to be maintained to demonstrate compliance with these limitations.



e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

There shall be no visible emissions of fugitive dust except for a period of time not to exceed 3 minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

b. Emission Limitation:

The emissions of fugitive dust shall not exceed 6.00 pounds of particulate emissions (PE) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd), 75% control efficiency for adequate moisture and the emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.2.2, Equation 1a, dated 12/03 as follows:

$$E = [k(s/12)^a (W/3)^b = 6.82 \text{ lb PE/VMT}$$

Where:

E = emission factor, pounds per vehicle mile traveled (lb/VMT)

k = 4.9 for PE

a = 0.7 for PE

b = 0.45



s = surface material silt content = 7.1 (Table 13.2.2-2)

W = average vehicle weight (26 tons)

Given 160 yard per hour of concrete production, a 10 yard load, 500 feet round trip and doubling the estimated mileage to account for the delivery of raw materials:

$$\text{VMT/hr} = 500 \text{ ft/load} (1 \text{ mi}/5280 \text{ ft})(160 \text{ yd concrete/hr})(1 \text{ load}/10 \text{ yd})(2)$$

$$\text{VMT/hr} = 3.52 \text{ mi/hr}$$

Then with 75% effective control by watering:

$$\text{Emissions} = (6.82 \text{ lb PE/VMT})(3.52 \text{ mi/hr})(1 - 0.75) = 6.00 \text{ lb PE/hr}$$

c. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.41 tons of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the hourly emission factor calculated above:

$$\text{Emissions} = 6.00 \text{ lb/hr} (75000 \text{ yd/yr})(1 \text{ hr}/160 \text{ yd})(1 \text{ t}/2000 \text{ lb}) = 1.41 \text{ t PE/yr}$$

d. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.53 pounds of PM10 per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd), 75% control efficiency for adequate moisture and the emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.2.2, Equation 1a, dated 12/03 as follows:

$$E = k(s/12)^a (W/3)^b = 1.74 \text{ lb PM10/VMT}$$

Where:

E = emission factor, pounds per vehicle mile traveled (lb/VMT)

k = 1.5 for PM10

a = 0.9 for PM10

b = 0.45

s = surface material silt content = 4.8 (Table 13.2.2-2)



W = average vehicle weight (26 tons)

Given 160 yard per hour of concrete production, a 10 yard load, 500 feet round trip and doubling the estimated mileage to account for the delivery of raw materials:

$$\text{VMT/hr} = 500 \text{ ft/load} (1 \text{ mi}/5280 \text{ ft})(160 \text{ yd concrete/hr})(1 \text{ load}/10 \text{ yd})(2)$$

$$\text{VMT/hr} = 3.52 \text{ mi/hr}$$

Then with 75% effective control by watering:

$$\text{Emissions} = (1.74 \text{ lb PM}_{10}/\text{VMT})(3.52 \text{ mi/hr})(1 - 0.75) = 1.53 \text{ lb PM}_{10}/\text{hr}$$

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.36 ton of PM₁₀ per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (75,000 cu yd) and the hourly emission factor calculated above:

$$\text{Emissions} = 1.53 \text{ lb/hr} (75000 \text{ yd/yr})(1 \text{ hr}/160 \text{ yd})(1 \text{ t}/2000 \text{ lb}) = 0.36 \text{ t PM}_{10}/\text{yr}$$

g) Miscellaneous Requirements

(1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a Notice of Site Approval if the following criteria is met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):

- a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
- b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
- c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
- d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and



- e. the Director has issued a Notice of Site Approval, stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's Notice of Site Approval for the site.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.