



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 04-01405

Fac ID: 0448970001

DATE: 3/22/2005

Kuhlman Corporation
James D. Gilmore
1845 Indianwood Circle
Maumee, OH 43537

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 3/22/2005
Effective Date: 3/22/2005**

FINAL PERMIT TO INSTALL 04-01405

Application Number: 04-01405
Facility ID: 0448970001
Permit Fee: **\$2900**
Name of Facility: Kuhlman Corporation
Person to Contact: James D. Gilmore
Address: 1845 Indianwood Circle
Maumee, OH 43537

Location of proposed air contaminant source(s) [emissions unit(s)]:

**444 Kuhlman Drive
Toledo, Ohio**

Description of proposed emissions unit(s):

portable plant seven, 160 cuyd/hr portable trans-mix concrete plant.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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Kuhlman Corporation
PTI Application: 04-01405
Issued: 3/22/2005

Facility ID: 0448970001

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	6.19
PM10	2.01

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F001 - portable plant seven, 160 cuyd/hr portable trans-mix concrete plant:	
loading of the trans-mix trucks	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(B)(1)
	OAC rule 3745-17-08(B), (B)(3)
	OAC rule 3745-17-07(B)(1)
	OAC rule 3745-17-08(B), (B)(3)
loading of the weigh hopper	OAC rule 3745-31-05(A)(3)

Applicable Emissions
Limitations/Control Measures

The emissions of fugitive dust shall not exceed 9.28 pounds of particulate emissions (PE) per hour or 2.18 tons of PE per year.

The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 2.24 pounds per hour or 0.53 ton per year.

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

See section A.2.a, d and e

See section A.2.b.

See section A.2.b.

The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour or 0.30 tons of PE per year.

The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour or 0.14 ton per year.

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

See section A.2.c,d and e.

See section A.2.b.

See section A.2.b.

2. Additional Terms and Conditions

- 2.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.

- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

- 2.c** 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.

- 2.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.

- 2.e** The annual particulate emission limitations specified above are based upon the emissions unit's potential to emit at an annual throughput restriction of 75,000 cubic yards of concrete.

B. Operational Restrictions

1. The maximum annual throughput for this emissions unit shall not exceed 75,000 cubic

yards of concrete.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain annual records of the volume of concrete produced in this emissions unit, in cubic yards per year.
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.

D. Reporting Requirements

1. The permittee shall submit annual reports that identify any exceedances of the annual throughput restriction. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit semiannual written reports that (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. 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.
3. Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable emissions unit shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:

- a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
- i. the portable emissions unit is equipped with the best available technology for such portable emissions unit;
 - ii. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO) or registration status;
 - iii. the applicant has provided proper notice of intent to relocate the portable emissions unit to the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the City of Toledo, Division of Environmental Services and the appropriate field office's (having jurisdiction over the new site) judgement, the proposed site is acceptable under OAC rule 3745-15-07.
- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
- i. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable emissions unit is equipped with best available technology;
 - iii. the portable emissions unit owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
 - vii. the portable emissions unit owner has provided Ohio EPA with 15 days written

notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable emissions unit must file a " Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site. Upon receipt of the notice, the City of Toledo, Division of Environmental Services, and/or appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

E. Testing Requirements

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

- 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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.058 lb PE/cuyd) as follows:

$$(160 \text{ cuyd/hr})(0.058 \text{ lb PE/cuyd}) = 9.28 \text{ lb PE/hr}$$

c. Emission Limitation:

The emissions of fugitive dust shall not exceed 2.18 tons of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.058 lb PE/cuyd) as follows:

$$(75,000 \text{ cuyd/yr})(0.058 \text{ lb PE/cuyd})(1 \text{ t}/2000 \text{ lb}) = 2.18 \text{ PTE/yr}$$

d. Emission Limitation:

The emissions of fugitive dust shall not exceed 2.24 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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.014 lb PM10/cuyd) as follows:

$$(160 \text{ cuyd/hr})(0.014 \text{ lb PM10/cuyd}) = 2.24 \text{ lb PM10/hr}$$

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.53 ton of PM10 per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the

maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.014 lb PM10/cuyd) as follows:

$$(75,000 \text{ cuyd/yr})(0.014 \text{ lb PM10/cuyd})(1 \text{ t}/2000 \text{ lb}) = 0.53 \text{ tPM10/yr}$$

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0079 lb PE/cuyd) as follows:

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

g. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.30 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0079 lb PE/cuyd) as follows:

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

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0038 lb PM10/cuyd) as follows:

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

i. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.14 ton of PM10 per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0038 lb PM10/cuyd) as follows:

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

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

Operations, Property, <u>and/or Equipment</u>	load-out	wind erosion
F002 - portable plant seven, 160 cuyd/hr portable trans-mix concrete plant: sand and aggregate storage piles		
load-in		
	front end loader	

Applicable Rules/Requirements

OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(B)(1)

OAC rule 3745-17-08(B), (B)(3), (B)(6)

OAC rule 3745-17-07(B)(6)

OAC rule 3745-17-08(B), (B)(6)

OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(B)(1)

OAC rule 3745-17-08(B), (B)(3), (B)(6), (B)(7)

OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(B)(1), (B)(5)

OAC rule 3745-17-08(B), (B)(2)

OAC rule 3745-31-05(A)(3)

Applicable Emissions <u>Limitations/Control Measures</u>	diameter (PM10) shall not exceed 0.61 pound per hour or 0.15 ton per year.	The emissions of fugitive dust shall not exceed 1.07 tons of PE per year.
The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour or 0.30 ton of PE per year.	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.	The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.43 ton per year.
The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour or 0.15 ton per year.	See section A.2.a, c, d and e.	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.
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 section A.2.f.	See section A.2.a, b, c and e.
See section A.2.a, c, d and e.	See section A.2.f.	See section A.2.f.
See section A.2.f.	The emissions of fugitive dust shall not exceed 1.38 pounds of particulate emissions (PE) per hour or 0.32 ton of PE per year.	See section A.2.f.
See section A.2.f.	The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.38 pound per hour or 0.09 ton per year.	
The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour or 0.30 ton of PE per year.	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.	
The emissions of fugitive dust equal to or less than 10 microns in	See section A.2.a, c, d and e.	
	See section A.2.f.	
	See section A.2.f.	

2. Additional Terms and Conditions

- 2.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.

- 2.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.
- 2.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.
- 2.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.
- 2.e** The annual particulate emission limitations specified above are based upon the emissions unit's potential to emit at the annual throughput restriction of 75,000 cubic yards of concrete contained in the associated emissions unit, F001. Therefore, no annual emission records are required to be maintained for this emissions unit to demonstrate compliance with these limitations.
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

None

C. 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.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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. Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable emissions unit shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:
 - a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
 - i. the portable emissions unit is equipped with the best available technology for such portable emissions unit;
 - ii. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO) or registration status;
 - iii. the applicant has provided proper notice of intent to relocate the portable emissions unit to the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the City of Toledo, Division of Environmental Services and the appropriate field office's (having jurisdiction over the new site) judgement, the proposed site is acceptable under OAC rule 3745-15-07.

- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
- i. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable emissions unit is equipped with best available technology;
 - iii. the portable emissions unit owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
 - vii. the portable emissions unit owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable emissions unit must file a " Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site. Upon receipt of the notice, the City of Toledo, Division of Environmental Services, and/or appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

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Issued

Facility ID: 0448970001

Emissions Unit ID: **F002**

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

E. Testing Requirements

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

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 one time emissions calculation utilizing the maximum hourly throughput rate (160 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0064 lb PE/cuyd for aggregate and 0.0015 lb PE/cuyd for sand) as follows:

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

c. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.30 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0064 lb PE/cuyd for aggregate and 0.0015 lb PE/cuyd

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Emissions Unit ID: **F002**

for sand) as follows:

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

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0031 lb PM10/cuyd for aggregate and 0.0007 lb PM10/cuyd for sand) as follows:

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

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.15 ton of PM10 per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0031 lb PM10/cuyd for aggregate and 0.0007 lb PM10/cuyd for sand) as follows:

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

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 cuyd), 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 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 (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:

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

g. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.32 ton of PE per year.

Applicable Compliance Method:

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

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

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 cuyd), 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:

$$E = k(s/12)^a (W/3)^b = 2.24 \text{ lb PM}_{10}/\text{VMT}$$

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 = 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:

$$\text{Emissions} = (2.24 \text{ lb PE/VMT})(0.68 \text{ mi/hr})(1 - 0.75) = 0.38 \text{ lb PM}_{10}/\text{hr}$$

i. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.09 ton of PM₁₀ per year.

Applicable Compliance Method:

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

$$\text{Emissions} = 0.38 \text{ lb/hr} (75000 \text{ yd/yr})(1 \text{ hr}/160 \text{ yd})(1 \text{ t}/2000 \text{ lb}) = 0.09 \text{ t PM}_{10}/\text{yr}$$

j. Emission Limitation:

The emissions of fugitive dust shall not exceed 1.73 tons of PE per year.

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 year, 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:

$$\text{usage} = 75,000 \text{ yd concrete/yr} (1865 \text{ lb aggregate/yd concrete})(1 \text{ cu.ft}/90 \text{ lb aggregate}) = 1,550,000 \text{ cu.ft aggregate/yr}$$

$$D_{\text{aggregate}} = 365 \text{ days} \div (1,550,000 \text{ cu.ft})(1 \text{ turnover}/90000 \text{ cu.ft}) = 21 \text{ days for aggregate}$$

$$\text{usage} = 75,000 \text{ yd concrete/yr} (1428 \text{ lb sand/yd concrete})(1 \text{ cu.ft}/100 \text{ lb sand}) = 1,070,000 \text{ cu.ft sand/yr}$$

$$D_{\text{sand}} = 365 \text{ days} \div (1,070,000 \text{ cu.ft})(1 \text{ turnover}/90000 \text{ cu.ft}) = 30 \text{ days for sand}$$

then:

$$E_{\text{aggregate}} = 0.05 (10/1.5)(21/90)(229/235)(20/15) = 0.101 \text{ lb /t}$$

$$E_{\text{sand}} = 0.05 (2/1.5)(30/90)(229/235)(20/15) = 0.029 \text{ lb /t}$$

and for a control efficiency of 75%:

$$\text{Emissions} = 1-0.75)[(0.101 \text{ lb /t})(75,000 \text{ yd concrete/yr})(1865 \text{ lb aggregate/yd concrete})$$

$$\begin{aligned} &+ \\ &(0.029 \text{ lb /t})(75,000 \text{ yd concrete/yr})(1428 \text{ lb sand/yd concrete}] (1/2000 \text{ lb})^2 \\ \text{Emissions} &= 1.07 \text{ Pte/yr} \end{aligned}$$

k. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.43 ton of PM10 per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a 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):

$$\text{Emissions} = 1.07 \text{ Pte/yr} (0.40 \text{ tPM10/Pte}) = 0.43 \text{ tPM10/yr}$$

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	the storage silo with a fabric filter	<u>Applicable Rules/Requirements</u>
F003 - portable plant seven, 160 cuyd/hr portable trans-mix concrete plant: transfer of sand and aggregate to bins		OAC rule 3745-31-05(A)(3)
		OAC rule 3745-17-07(B)(1)
		OAC rule 3745-17-08(B), (B)(3)
pneumatic conveying of cement to		OAC rule 3745-31-05(A)(3)

Applicable Emissions
Limitations/Control Measures

The emissions of fugitive dust shall not exceed 1.26 pounds of particulate emissions (PE) per hour or 0.30 ton of PE per year.

The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 0.61 pound per hour or 0.15 ton per year.

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

See sections A.2.a, c, d and e.

See section A.2.f.

See section A.2.f.

The particulate emissions (PE) from the baghouse stack shall not exceed 0.03 pounds per hour or 0.01 ton per year.

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 or 0.01 ton per year.

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 sections A.2.b, c, d and e.

See section A.2.f.

See section A.2.f.

OAC rule 3745-17-07(B)(1)

OAC rule 3745-17-08(B), (B)(3)

2. Additional Terms and Conditions

- 2.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.

- 2.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.

- 2.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.

- 2.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.

- 2.e** The annual particulate emission limitations specified above are based upon the emissions unit's potential to emit at the annual throughput restriction of 75,000 cubic yards of concrete contained in the associated emissions unit, F001. Therefore, no annual throughput records are required to be maintained for this emissions unit to demonstrate compliance with these limitations.

- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

None

C. 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.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the pneumatic conveying of cement or the transfer of sand and aggregate to the elevated bins, and (c) describe any corrective actions taken to minimize or eliminate the 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. Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable emissions unit shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:
 - a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
 - i. the portable emissions unit is equipped with the best available technology for such portable emissions unit;
 - ii. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO) or registration status;
 - iii. the applicant has provided proper notice of intent to relocate the portable emissions unit to the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the City of Toledo, Division of Environmental Services and the appropriate field office's (having jurisdiction over the new site) judgement, the proposed site is acceptable under OAC rule 3745-15-07.
 - b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
 - i. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or

registration status;

- ii. the portable emissions unit is equipped with best available technology;
- iii. the portable emissions unit owner has identified the proposed site to Ohio EPA;
- iv. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
- v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
- vi. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
- vii. the portable emissions unit owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable emissions unit must file a " Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site. Upon receipt of the notice, the City of Toledo, Division of Environmental Services, and/or appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

E. Testing Requirements

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

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0064 lb PE/cuyd for aggregate and 0.0015 lb PE/cuyd for sand) as follows:

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

d. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.30 ton of PE per year.

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Facility ID: 0448970001

Emissions Unit ID: F003

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0064 lb PE/cuyd for aggregate and 0.0015 lb PE/cuyd for sand) as follows:

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

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0031 lb PM10/cuyd for aggregate and 0.0007 lb PM10/cuyd for sand) as follows:

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

f. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.15 ton of PM10 per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0031 lb PM10/cuyd for aggregate and 0.0007 lb PM10/cuyd for sand) as follows:

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

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0002 lb PE/cuyd) as follows:

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

h. Emission Limitation:

The particulate emissions (PE) from the baghouse stack shall not exceed 0.01 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0002 lb PE/cuyd) as follows:

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

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 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0001 lb PM10/cuyd) as follows:

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

j. Emission Limitation:

The emissions of PM10 from the baghouse stack shall not exceed 0.01 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) and the controlled emissions factor listed in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.12, Table 11.12-3, dated 10/01/98, (0.0001 lb PM10/cuyd) as follows:

$$(75,000 \text{ cuyd/yr})(0.0001 \text{ lb PM10/cuyd}) \div (2000 \text{ lb /t}) = 0.01 \text{ tPM10/yr}$$

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
F004 - portable plant seven, 160 cuyd/hr portable trans-mix concrete plant: unpaved roadways and parking lots	OAC rule 3745-31-05(A)(3)	<p>The emissions of fugitive dust shall not exceed 6.00 pounds of particulate emissions (PE) per hour or 1.41 tons of PE per year.</p> <p>The emissions of fugitive dust equal to or less than 10 microns in diameter (PM10) shall not exceed 1.53 pounds per hour or 0.36 ton per year.</p> <p>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.</p> <p>See section A.2.a thru h.</p>
	OAC rule 3745-17-07(B)(1), (B)(5)	See section A.2.i.
	OAC rule 3745-17-08(B), (B)(2), (B)(7), (B)(8), (B)(9)	See section A.2.i.

2. Additional Terms and Conditions

- 2.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.

- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.

- 2.h** The annual particulate emission limitations specified above are based upon the emissions unit's potential to emit at the annual throughput restriction of 75,000 cubic yards of concrete contained in the associated emissions unit, F001. Therefore, no annual emission records are required to be maintained for this emissions unit to demonstrate compliance with these limitations.
- 2.i** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform daily inspections of all unpaved roadways and parking areas comprising this emissions unit.
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.
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 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 an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented. 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. Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable emissions unit shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:
 - g. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
 - i. the portable emissions unit is equipped with the best available technology for such portable emissions unit;
 - ii. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO) or registration status;
 - iii. the applicant has provided proper notice of intent to relocate the portable emissions unit to the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the City of Toledo, Division of Environmental Services and the appropriate field office's (having jurisdiction over the new site) judgement, the proposed site is acceptable under OAC rule 3745-15-07.

- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable emissions unit may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
- i. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable emissions unit is equipped with best available technology;
 - iii. the portable emissions unit owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
 - vii. the portable emissions unit owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable emissions unit must file a " Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the City of Toledo, Division of Environmental Services and the appropriate field office having jurisdiction over the new site. Upon receipt of the notice, the City of Toledo, Division of Environmental Services, and/or appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete

certain portable sources or add or delete certain terms and conditions as appropriate.

E. Testing Requirements

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

- 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. 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 cuyd), 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 year.

Applicable Compliance Method:

Compliance shall be demonstrated by a one time emissions calculation utilizing the maximum annual throughput rate (75,000 cuyd) 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 cuyd), 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:

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

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

Then with 75% effective control by watering:

$Emissions = (1.74 \text{ lb PM10}/VMT)(3.52 \text{ mi/hr})(1 - 0.75) = 1.53 \text{ lb PM10/hr}$

e. Emission Limitation:

The emissions of fugitive dust shall not exceed 0.36 ton of PM10 per year.

Applicable Compliance Method:

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

$Emissions = 1.53 \text{ lb/hr} (75000 \text{ yd/yr})(1 \text{ hr}/160 \text{ yd})(1 \text{ t}/2000 \text{ lb}) = 0.36 \text{ t PM10/yr}$

F. Miscellaneous Requirements

None