



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WAYNE 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: 02-20561

Fac ID: 0285030404

DATE: 6/14/2005

Orrville Trucking and Grading-Wooster
David Renner
PO Box 220
Orrville, OH 44667

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

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 6/14/2005
Effective Date: 6/14/2005**

FINAL PERMIT TO INSTALL 02-20561

Application Number: 02-20561
Facility ID: 0285030404
Permit Fee: **\$625**
Name of Facility: Orrville Trucking and Grading-Wooster
Person to Contact: David Renner
Address: PO Box 220
Orrville, OH 44667

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

**660 Freedlander
Wooster, Ohio**

Description of proposed emissions unit(s):

Concrete Batch 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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Facility ID: 0285030404

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>
PM	12.20

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,
and/or Equipment

Weigh Hopper Loading of
Cement, Fly Ash, Slag, Sand
and Aggregate

P901 - Batch and Truck Concrete
Plant-Concrete Batching
Operations including Materials
Handling, Loading of Two Cement
Silos, Loading of Sand, Aggregate,
and Cement into Weigh Hopper,
and Mix Truck Loading.

Cement and Cement Supplement
silo operations.

Transfer of Sand and
Aggregate to Elevated Bins

Concrete batch plant P901--mix-truck
and batch loading operations.

Applicable Rules/Requirements

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

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

OAC rule 3745-17-11(B)

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

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

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

OAC rule 3745-17-11(B)

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

OAC rule 3745-17-07(B)

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

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

OAC rule 3745-17-11(B)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 12.20 tons/yr.

Visible fugitive particulate emissions from any portion of this emissions unit shall not exceed ten (10) percent opacity as a three-minute average.

See sections A.2.b through A.2f for the best available control measure requirements.

Particulate emissions from this emissions unit shall not exceed 3.42 TPY.

At all times during the transfer of sand and aggregate, the drop height of the front-end bucket shall be minimized to the extent possible to minimize or eliminate visible emissions of fugitive dust.

Sand and aggregate loaded into the elevated bins shall, at all times, have an inherent moisture content sufficient to minimize or eliminate visible emissions of fugitive dust.

The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to

OAC rule 3745-31-05(A)(3).
See A.2.a below.

Particulate emissions from this emissions unit shall not exceed .21 TPY.

Emissions from the outlet of the control equipment serving this emissions unit shall achieve an emissions rate of not more than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet.

The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

Particulate emissions from this emissions unit shall not exceed 1.22 TPY.

Emissions from the outlet of the control equipment serving this emissions unit shall achieve an emissions rate of not more than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet, whichever is less stringent.

**Orrvil
PTI A
Issued: 6/14/2005**

Emissions Unit ID: **P901**

The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

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The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

Particulate emissions from this emissions unit shall not exceed 7.35 TPY.

Visible emissions of fugitive dust during truck loading operations shall not exceed 10 percent opacity, as a 3-minute average.

The central mix drum shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient to eliminate visible emissions of fugitive dust during transfer operations.

Emissions from the outlet of the control equipment serving this emissions unit shall achieve an emissions rate of not more than 0.030 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet.

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 are listed below:

- i. Transfer of sand, gravel, and/or limestone aggregate from storage pile(s) to open dump bin by front-end loader or dump truck.
- ii. Transfer of sand, gravel, and/or limestone aggregate from open dump bin to batch plant weigh-hopper by stationary conveyor system.

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

- i. For transfer of sand, gravel, and/or limestone aggregate from storage pile(s) to open dump bin by front-end loader or dump truck, fugitive particulate emissions shall be minimized or eliminated by controlling the moisture content of the sand, gravel, and/or limestone material through application of water or other suitable dust suppressants and by minimizing the drop height from the front-loader and/or dump truck into the open bin.
- ii. For transfer of sand, gravel, and/or limestone aggregate from open dump bin to batch plant weigh-hopper by stationary conveyor system, fugitive particulate emissions shall be minimized or eliminated by controlling the moisture content of the sand/gravel and/or limestone materials through application of water or other suitable dust suppressants and by enclosure of the batch plant weigh-hopper and use of an appropriate particulate emissions control system.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue

during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.d** The permittee shall employ the following reasonably available control measures for the above-identified cement silo loading operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements:
- i. Cement shall be transferred pneumatically to the storage silo; this transfer system shall be adequately enclosed so as to eliminate at all times visible emissions of fugitive dust. Any visible emissions of cement dusts emanating from the delivery vehicle during transfer shall be cause for the immediate halt of the unloading process and the refusal of the cement load until the situation is corrected.
 - ii. The cement silo vent shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to minimize at all times visible emissions of fugitive dust at the point of capture.
- 2.e** The permittee shall employ the following reasonably available control measures for the above-identified weigh hopper operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements:
- i. The concrete batching weigh hopper shall be adequately enclosed and the enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust.
 - ii. The sand/aggregate weigh hopper transfer conveyor discharge to the concrete batching weigh hopper shall be enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust at the point of capture.
- 2.f** The permittee shall employ the following reasonably available control measures for the above-identified mix-truck loading operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. The point at which the transit mix truck is loaded shall be adequately enclosed and the drop height of the cement/sand/aggregate mixture into the truck shall be minimized or controlled by either a telescopic or hooded chute (shroud) so as to minimize or eliminate visible emissions of fugitive dust from this operation
- 2.g** Truck loading of wet concrete at a this facility is not expected to generate visible particulate emissions.

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Orrville Trucking and Grading-Wooster

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Facility ID: 0285030404

Emissions Unit ID: P901

B. Operational Restrictions

1. The maximum hourly production rate for this truck mix concrete facility shall not exceed 250 cubic yards of concrete (500 tons) per hour.
2. The maximum annual production rate for this truck mix concrete facility shall not exceed 100,000 cubic yards of concrete (200,000 tons) per year.
3. The permittee shall regularly maintain the baghouse(s) and fabric filter(s) control equipment associated with this emissions unit in accordance with manufacturers recommendations. Maintenance shall include regular repair and/or replacement of filters so as to maximize the particulate collection efficiency of this dust control system.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain annual records of the cubic yards or tons of concrete produced at this facility. The information shall be kept separately for both the central mix and truck mix operations.
2. The permittee shall perform weekly checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible particulate emissions from the fabric filters serving this emissions unit. No inspections are required on days the material handling operations are not in operation. The presence or absence of any visible particulate emissions shall be recorded electronically or in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the total duration of any visible emission incident; and
 - b. any corrective actions taken to eliminate the visible emissions.

The information above shall be kept separately for each fabric filter serving this emissions unit.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from each sand and/or aggregate transfer point and truck loading serving this emissions unit. No inspections are required on days the material handling operations are not in operation. The presence or absence of any visible emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:

- a. whether the emissions are representative of normal operations;
- b. if the emissions are not representative of normal operations, the cause of the visible emissions;
- c. the total duration of any visible emission incident; and
- d. any corrective actions taken to eliminate the visible emissions.

The information above shall be kept separately for each sand and/or aggregate transfer point and truck loading serving this emissions unit.

4. The permittee shall maintain records of the amounts of sand, aggregate, and cement processed at this plant so as to be able to determine the actual amount of fugitive dust emissions generated over any annual period. The permittee shall also maintain records of the gross yards (or tonnage) of concrete produced and transported from the facility on a monthly basis for purpose of determining the annual amount of fugitive dusts emitted from this emissions unit. These records shall be kept at the facility and shall be made available for review by Ohio EPA personnel upon request.
5. The permittee shall inspect the baghouse fabric filter control system serving both the cement silo and the batching operation at least once per week for the purpose of determining the need to maintain, repair, and/or replace any of the filters in the system or any portion of the system electrical controls. A broken or severely worn filter, or worn electrical control components, shall be replaced/repared immediately so as to prevent unnecessary emissions of fugitive dust from this emissions unit. Records of inspections, repairs, and maintenance to this emissions control system shall be noted in a facility log.
6. The permittee shall inspect the shroud and chute used to load the sand/aggregate/cement mixture into the concrete mix-trucks on a weekly basis to determine if these devices adequately minimize fugitive dust emissions which arise during the loading of the mix-trucks. If either the shroud or chute is excessively worn, they should be replaced immediately so as to minimize fugitive dust emissions from this emissions unit. The results of this inspection and any maintenance which is performed as a result of this inspection should be noted in a facility log.

D. Reporting Requirements

1. The permittee shall submit annual reports that specify the total cubic yards or total tons of concrete produced at this facility. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 of each year and shall cover the previous 12-month period.
2. The permittee shall submit quarterly deviation (excursion) reports which note the

following:

- a. identify all days during which any abnormal visible fugitive particulate emissions were observed from each sand and/or aggregate transfer point and truck loading serving this emissions unit;
- b. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions;
- c. identify all days during which any visible particulate emissions were observed from any fabric filter serving this emissions unit; and
- d. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:

Each fabric filter shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).
 - b. Transfer of Sand and Aggregate to Elevated Bins
Emission Limitation: PE shall not exceed 3.42 tons/yr.

Applicable compliance method:
Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement

supplement (slag/fly ash) and 6% water.

Aggregate emission factor = 0.0069 lb PE/ton (AP-42, 11.12, 10/01)

Sand emission factor = 0.0021 lb PE/ton (AP-42, 11.12, 10/01)

Aggregate feed hopper loading = 264,000 tons/yr max transfer rate

$264,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.91 \text{ ton PE/yr}$

Aggregate feed hopper to conveyor = 264,000 tons/yr max transfer rate

$264,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.91 \text{ ton PE/yr}$

Aggregate conveyor to bin = 264,000 tons/yr max transfer rate

$264,000 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.91 \text{ ton PE/yr}$

Sand feed hopper loading = 216,000 tons/yr max transfer rate

$216,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.23 \text{ ton PE/yr}$

Sand feed hopper to conveyor = 216,000 tons/yr max transfer rate

$216,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.23 \text{ ton PE/yr}$

Sand conveyor to bin = 216,000 tons/yr max transfer rate

$216,000 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.23 \text{ ton PE/yr}$

Aggregate & sand transfer total = 3.42 tons PE/yr

c. Portland Cement, Fly Ash and Slag Silos

Emission Limitation: PE shall not exceed 0.21 ton/yr.

Applicable compliance method:

Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement supplement (slag/fly ash) and 6% water.

Cement emission factor = 0.00099 lb PE/ton (AP-42, 11.12, 10/01)

Supplement emission factor = 0.0089 lb PE/ton (AP-42, 11.12, 10/01)

Truck to cement silo = 42,000 tons/yr max transfer rate

$42,000 \text{ tons/yr} \times 0.00099 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.02 \text{ ton PE/yr}$

Truck to cement sup silo = 42,000 tons/yr max transfer rate

$42,000 \text{ tons/yr} \times 0.0089 \text{ lbs/ton} \times \text{ton}/2000 \text{ lbs} = 0.19 \text{ ton PE/yr}$

Cement & cement supplement unloading total = 0.21 ton PE/yr

d. Weigh Hopper Loading of Cement, Fly Ash, Slag, Sand and Aggregate

Emission Limitation: PE shall not exceed 1.22 tons/yr.

Applicable compliance method:

Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement supplement (slag/fly ash) and 6% water.

Emission factor = 0.0051 lb PE/ton (AP-42, 11.12, 10/01)

Bins to weigh hopper = 480,000 tons/yr max transfer rate
 480,000 tons/yr x 0.0051 lb/ton x ton/2000 lbs = 1.22 tons PE/yr

Weigh hopper loading total = 1.22 tons PE/yr

- e. Truck and Central mix drum loading of Aggregate, Sand, Cement, and Cement Supplement
 Emission Limitation: PE shall not exceed 7.35 ton/yr.

Applicable compliance method:

Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement supplement (slag/fly ash) and 6% water.

Total loading operations emissions = Truck Loading total + Central Loading total.

Truck Loading Emission factor = 0.21 lb PE/ton (AP-42, 11.12, 10/01)

Central Mix Emission factor = 0.011 lb PE/ton (AP-42, 11.12, 10/01)

Weigh hopper to truck or central mix drum = 84,000 tons/yr max transfer rate

Truck Loading Emissions:

$$E = T * EF$$

Where:

T = Transfer Rate in tons per year for Truck Loading operation

EF = 0.21 lb PE/ton Truck loading emission factor (AP-42, 11.12, 10/01)

Central Mix Drum Loading Emissions:

$$E = T * EF$$

Where:

T= Transfer Rate in tons per year for Central Mix Drum Loading operation
EF= 0.011 lb PE/ton Central mix emission factor (AP-42, 11.12, 10/01)

f. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 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, 1997.

g. Emission Limitation:

There shall be no visible particulate emissions from the fabric filters serving this emissions unit.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 22 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, 1997.

F. Miscellaneous Requirements

1. The permittee may replace equipment, add additional equipment, or alter existing equipment as long as the change is consistent with applicable Ohio EPA guidance document(s) and does not meet the definition of "modification" or "new source" as defined in OAC rule 3745-31-01(B).