



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 05-14433

Fac ID: 0575010222

DATE: 4/22/2008

Hanson Pipe and Products Ohio, Inc.
Chris Gahagan
2900 Terminal Avenue
Richmond, VA 23234

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

Sincerely,

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

CC: USEPA

SWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 4/22/2008
Effective Date: 4/22/2008**

FINAL PERMIT TO INSTALL 05-14433

Application Number: 05-14433
Facility ID: 0575010222
Permit Fee: **\$1200**
Name of Facility: Hanson Pipe and Products Ohio, Inc.
Person to Contact: Chris Gahagan
Address: 2900 Terminal Avenue
Richmond, VA 23234

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4625 Hardin - Wapak Road
Sidney, 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

Chris Korleski
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 (i.e., postmarked) quarterly 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

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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)

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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.

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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.

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	23.3
OC	9.7

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 -(K001) - Concrete Product Coating

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	OC emissions shall not exceed 2.4 tons per rolling - 12 month period. See Sections A.2.a, A.2.b, B.1., and B.2.
OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day when using photochemically reactive materials.

2. Additional Terms and Conditions

- 2.a The 2.4 tons of organic compound (OC) emissions are based on the OC content of the coating materials and a voluntary rolling 12-month usage limitation from the permittee.
- 2.b The emission of any individual toxic air pollutant, as listed in OAC rule 3745-114-01, from this emissions unit shall be less than 1 ton per year.
- 2.c Modeling to demonstrate compliance with the Toxic Air Contaminant Statute in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-1141-01, will be less than 1.0 ton per year. OAC rule 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

B. Operational Restrictions

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1. The maximum coating usage for this emissions unit shall not exceed 1332 gallons per rolling - 12 month period, as applied.
2. The OC content of the coatings applied in this emissions unit shall not exceed 3.59 pounds per gallon, as applied.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information monthly in this emissions unit:
 - a. The name and identification number of each coating;
 - b. The OC content of each coating, in pounds per gallon as applied;
 - c. The volume of each coating employed, in gallons per month;
 - d. the rolling, 12-month total combined coating employed in gallons, (the total coating employed, in gallons, for the current month plus the total amount of coating employed, in gallons, for the 11 previous calendar months);
 - e. The total OC emissions from all coatings employed (b x c); and
 - f. the rolling, 12-month total combined OC emissions, in tons, (the total OC emitted, in tons, for the current month plus the total amount of OC emitted, in tons, for the 11 previous calendar months).
2. The permittee shall collect and record the following information for each day for the coating operation:
 - a. the company identification for each coating and photochemically reactive material employed;
 - b. the number of gallons of each coating and photochemically reactive material employed;
 - c. the organic compound content of each coating and photochemically reactive material, in pounds per gallon;
 - d. for each day during which a photochemically reactive material is employed, the

Emissions Unit ID: **K001**

total organic compound emission rate for all coatings and photochemically reactive materials, in pounds per day;

- e. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation; and
- f. for each day during which a photochemically reactive material is employed, the average hourly organic compound emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average).

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. for any exceedance of the rolling, 12-month coating usage limitation of 1332 gallons;
 - b. for any exceedance of the rolling, 12-month OC emission limitation of 2.4 tons;
 - c. any usage of coatings with an OC content greater than 3.59 lbs/gal, as applied;
 - d. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the coatings and photochemically reactive materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - e. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the coatings and photochemically reactive materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

The reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit unless otherwise specified.

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):

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- a. Emissions Limitation:
OC emissions shall not exceed 2.4 tons per year.

Applicable Compliance Method:

The annual VOC emissions limitation from coating material use was calculated from the following equation:

$$\text{AER} = \text{Con} \times \text{AU}$$

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where:

Con = OC content (3.59 lb/gal)

AU = Annual usage limitation (1332 gal/yr)

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2. Formulation data or USEPA Method 24 shall be used to determine the OC content or any material used in this emissions unit.

- b. Emissions Limitation
OC emissions shall not exceed 8 lbs/hr and 40 lbs/day when using photochemically reactive materials.

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2. Formulation data or USEPA Method 24 shall be used to determine the OC content or any material used in this emissions unit.

- 2. Compliance with the usage limitation specified in terms and conditions B.1 shall be based upon the recordkeeping requirements as specified in term and condition C.2.

F. Miscellaneous Requirements

None

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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 - (P001) - Concrete Batch Plant with mixer, silo, baghouses, weight hoppers, and storage bins

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The overall particulate emissions (PE) shall not exceed 23.3 ton/yr.</p> <p>Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 3-minute average.</p> <p>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.</p> <p>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.</p> <p>Each fabric filter(s) serving any silo and weigh hopper shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the outlet(s).</p> <p>See sections A.2.c., A.2.d., and A.2.e.</p>
OAC rule 3745-17-07(A)	See A.2.b below.
OAC rule 3745-17-07(B)	See A.2.a below.
OAC rule 3745-17-08(B)	See A.2.a below.
OAC rule 3745-17-11(B)	See A.2.b below.

2. Additional Terms and Conditions

Emissions Unit ID: P001

- 2.a** For facilities in Appendix A areas as defined in OAC rule 3745-17-08(D), the requirements established pursuant to OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B) are equivalent to or less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b** The requirements established pursuant to OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c** The permittee shall employ the following best available control measures for the above-identified cement and cement supplement silos for the purpose of ensuring compliance with the above-mentioned applicable requirements:
- a. Cement and cement supplement shall be transferred pneumatically to the cement and cement supplement silos. The pneumatic system shall be adequately enclosed so as to eliminate at all times visible emissions of fugitive dust. Any visible emissions of cement and/or cement supplement dust emanating from the delivery vehicle during transfer shall be cause for the immediate halt of the unloading process and the refusal of the cement and/or cement supplement load until the situation is corrected.
 - b. Each cement and cement supplement silo vent shall be adequately 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.d** The permittee shall employ the following best available control measures for the above-identified weigh hoppers for the purpose of ensuring compliance with the above-mentioned applicable requirements:
- a. The weigh hoppers shall be sufficiently enclosed so as to minimize or eliminate at all times visible emissions of fugitive dust.
 - b. The transfer of cement/cement supplement to the concrete batching weigh hoppers shall be enclosed and vented to a fabric filter. The enclosure shall be

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sufficient so as to minimize or eliminate at all times visible emissions of fugitive dust at the point of capture.

- 2.e The annual particulate emissions (PE) of 23.3 tons per year represents the maximum potential emissions from this emissions unit as based on the maximum operational rate to 8760 hours of operation, therefore; there is no need for throughput limitations of record keeping. Prior to modifying this emissions unit that would increase the hourly operational rate, the increases in the potential emissions will need to be addressed under future permitting process prior to initiating the planned modification.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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:

Hanson Pipe and Products Ohio, Inc.

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Emissions Unit ID: P001

- 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.

D. Reporting Requirements

1. 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 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. Emission Limitation:
The overall particulate emissions (PE) shall not exceed 23.3 tons/yr.
 - (i) Transfer of Sand and Aggregate to Elevated Bins

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Maximum throughput and calculations are based on a mix design consisting of 43.6% aggregate, 43.6% sand, 10.9% cement, and 1.9% cement supplement (slag/fly ash).

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Aggregate emission factor = 0.0069 lb PE/ton (AP-42, 11.12-2, 06/06)
 Sand emission factor = 0.0021 lb PE/ton (AP-42, 11.12-2, 06/06)

Aggregate feed hopper loading = 256,668 tons/yr max transfer rate
 $256,668 \text{ tons/yr} \times 0.0069 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.89 \text{ ton PE/yr}$
 Sand feed hopper loading = 256,668 tons/yr max transfer rate
 $256,668 \text{ tons/yr} \times 0.0021 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 0.27 \text{ ton PE/yr}$

Aggregate & sand transfer total = 1.16 tons PE/yr

(ii). Cement, Fly Ash and Slag Silos

Maximum throughput and calculations are based on a mix design consisting of 43.6% aggregate, 43.6% sand, 10.9% cement, and 1.9% cement supplement (slag/fly ash) and a control efficiency (CE) of 99.0% (1- .99).

Cement emission factor = 0.72 lb PE/ton (AP-42, 11.12-2, 06/06)
 Supplement emission factor = 3.12 lb PE/ton (AP-42, 11.12-2, 06/06)

Truck to cement silo = 63,969 tons/yr max transfer rate
 $63,969 \text{ tons/yr} \times 0.72 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} \times \text{CE} = 0.23 \text{ ton PE/yr}$
 Truck to cement sup silo = 11,200 tons/yr max transfer rate
 $11,200 \text{ tons/yr} \times 3.12 \text{ lbs/ton} \times \text{ton}/2000 \text{ lbs} \times \text{CE} = 0.17 \text{ ton PE/yr}$

Cement & cement supplement unloading total = 0.4 ton PE/yr

(iii). Weigh Hopper Loading of Cement, Fly Ash, Slag, and possibly Sand and Aggregate

Maximum throughput and calculations are based on a mix design consisting of 43.6% aggregate, 43.6% sand, 10.9% cement, and 1.9% cement supplement (slag/fly ash).

Emission factor = 0.0051 lb PE/ton of aggregate and sand (AP-42, 11.12-2, 06/06)

Bins to weigh hopper = 513,340 tons/yr max transfer rate
 $513,340 \text{ tons/yr} \times 0.0051 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 1.3 \text{ tons PE/yr}$

Weigh hopper loading total = 1.3 tons PE/yr

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- (iv). Central Mix Drum Loading of Aggregate, Sand, Cement and Cement Supplement

Emission factor = 0.544 lb PE/ton of cement and cement supplement (AP-42, 11.12-2, 06/06)

Central Mix Drum loading = 75,150 tons/yr max transfer rate
75,510 tons/yr x 0.544 lb/ton x ton/2000 lbs = 20.44 tons PE/yr

Central Mix Drum loading total = 20.44 tons PE/yr

- (v). Total Particulate Emissions (PE) = 23.30 ton/year potential.

Applicable Compliance Method:

Compliance is based on the maximum potential daily throughput of 1613 tons per day. Prior to any increase in the daily potential throughput rate, the potential increased emissions will need to be reviewed in accordance with any applicable State and or Federal regulation.

- c. 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.

- d. Emission Limitation:
There shall be no visible particulate emissions from the fabric filters serving this emissions unit.

Applicable Compliance Method:

Emissions Unit ID: P002

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

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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 - (P002) - Concrete Part Forming

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	OC emissions shall not exceed 7.3 tons per rolling - 12 month period. See Sections A.2.a, B.1., and B.2.
OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day when using photochemically reactive materials.

2. Additional Terms and Conditions

- The 7.3 tons of organic compound (OC) emissions are based on the OC content of the coating materials and a voluntary rolling 12-month usage limitation from the permittee.

B. Operational Restrictions

- The maximum coating usage for this emissions unit shall not exceed 4307 gallons per rolling - 12 month period, as applied.

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2. The monthly volume weighted average of OC content of the coatings applied in this emissions unit shall not exceed 3.40 pounds per gallon, as applied

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information monthly in this emissions unit:
 - a. The name and identification number of each form release agent;
 - b. The OC content of each form release agent in pounds per gallon as applied;
 - c. The volume of each form release agent employed, in gallons per month;
 - d. the rolling, 12-month total combined form release agent employed in gallons, (the total form release agent employed, in gallons, for the current month plus the total amount of form release agent employed, in gallons, for the 11 previous calendar months);
 - e. The total OC emissions from all form release agents employed (b x c); and
 - f. the rolling, 12-month total combined OC emissions, in tons, (the total OC emitted, in tons, for the current month plus the total amount of OC emitted, in tons, for the 11 previous calendar months).
2. The permittee shall collect and record the following information for each day for the part forming operation:
 - a. the company identification for each form release agent and photochemically reactive material employed;
 - b. the number of gallons of each form release agent and photochemically reactive material employed;
 - c. the organic compound content of each form release agent and photochemically reactive material, in pounds per gallon;
 - d. for each day during which a photochemically reactive material is employed, the total organic compound emission rate for all form release agents and

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photochemically reactive materials, in pounds per day;

- e. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation; and
- f. for each day during which a photochemically reactive material is employed, the average hourly organic compound emission rate for all form release agents and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average).

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. for any exceedance of the rolling, 12-month usage limitation of 4307 gallons;
 - b. for any exceedance of the rolling, 12-month OC emission limitation of 7.3 tons;
 - c. any usage of form release agents with an OC content greater than 3.40 lbs/gal, as applied;
 - d. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the form release agents and photochemically reactive materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - e. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the form release agents and photochemically reactive materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

The reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit unless otherwise specified.

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):

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- a. Emissions Limitation:
OC emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method:

The annual OC emissions limitation from coating material use was calculated from the following equation:

$$\text{AER} = \text{Con} \times \text{AU}$$

where:

Con = OC content (3.4 lb/gal)

AU = Annual usage limitation (4307 gal/yr)

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2. Formulation data or USEPA Method 24 shall be used to determine the OC content or any material used in this emissions unit.

- b. Emissions Limitation
OC emissions shall not exceed 8 lbs/hr and 40 lbs/day when using photochemically reactive materials.

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2. Formulation data or USEPA Method 24 shall be used to determine the OC content or any material used in this emissions unit.

2. Compliance with the usage limitation specified in terms and conditions B.1 shall be based upon the record keeping requirements as specified in term and condition C.2.

F. Miscellaneous Requirements

None