



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
WASHINGTON 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: 06-07331**

**Fac ID: 0684000015**

**DATE: 5/11/2006**

Smith Concrete Belpre Plant  
Katherine Beach  
301 Frank Rd.  
Columbus, OH 43207

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

SEDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 5/11/2006  
Effective Date: 5/11/2006**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 06-07331

Application Number: 06-07331  
Facility ID: 0684000015  
Permit Fee: **\$0**  
Name of Facility: Smith Concrete Belpre Plant  
Person to Contact: Katherine Beach  
Address: 301 Frank Rd.  
Columbus, OH 43207

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

**State Route 618  
Belpre, Ohio**

Description of proposed emissions unit(s):

**Administrative modification Requested by the permittee to modify the reporting frequency.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

**Smith Concrete Belpre Plant**  
**PTI Application: 06-07331**  
**Modification Issued: 5/11/2006**

**Facility ID: 068400001**

## **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

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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.

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## 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.

## 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	34.8

Smith

PTI A

Modification Issued: 5/11/2006

Emissions Unit ID: F001

**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

Applicable Rules/Requirements

F001 -Plant roadways and parking areas

unpaved roadways and parking areas (see Section A.2.b)

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

paved roadways and parking areas (see Section A.2.a)

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

OAC rule 3745-17-07 (B)(4)

OAC rule 3745-17-08 (B), (B)(8), (B)(9)

Emissions Unit ID: F001

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

Applicable Emissions  
Limitations/Control Measures

Particulate emissions (PE) from the plant roadways and parking areas shall not exceed 0.6 tons per year.

eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j).

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

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

There shall be no visible particulate emissions except for one minute during any 60-minute period.

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

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

The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, A.2.d, and A.2.f through A.2.j).

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

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

There shall be no visible particulate emissions except for 3 minutes during any 60-minute period.

The permittee shall implement best available control measures that are sufficient to minimize or

**2. Additional Terms and Conditions**

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

Main Drive  
Cement Truck Route  
Secondary Roadways

paved parking areas:

Mixer Truck Parking

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

Cement Truck Route

unpaved parking areas:

## Employee Parking

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on the unpaved shoulders of all paved roadways 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 shoulders of all paved roadways 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.e** 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 watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** 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 with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

- 2.h 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.i 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.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

## B. Operational Restrictions

None.

## C. Monitoring and/or Recordkeeping Requirements

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

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
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Main Drive	daily
Cement Truck Route	
Secondary Roadways	
Mixer Truck Parking	

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
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Cement Truck Route	daily
Employee Parking	

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee 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 3.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which 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.

**Modification Issued: 5/11/2006**

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitation for the paved and unpaved roadways and parking areas 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)(d) of OAC rule 3745-17-03.
2. Emission Limitation:  
Particulate emissions shall not exceed 0.6 tons per year.

Applicable Compliance Method:  
paved roadways and parking areas

The emission factor calculation for paved roadways and parking areas in AP-42 section 13.2.2 (September, 1998) may be utilized to determine compliance. Initial compliance has been determined using inputs representing current conditions as follows:

$$E = k(sL/2)^{0.65} \times (W/3)^{1.5}$$

where:

E = size-specific emission factor (lb/VMT)  
k = 0.082 (dimension less constant) particle size multiplier  
sL = 8.2 (dimension less constant) road surface silt loading  
W = 22.2 tons of average vehicle weight

Therefore, E = 4.13 lbs particulate/VMT

Maximum travel = 2826 VMT/year

(2826 VMT/yr)(4.13 lbs/VMT) = 11,671 lbs of particulate/year

(11,671 lbs/year)(1 ton/2000 lbs) = 5.84 tons of particulate uncontrolled/year

Assume 90% control for roadway watering

$(5.84 \text{ tons/year}) (.10) = 0.59 \text{ ton of particulate controlled/year}$

### unpaved roadways and parking areas

The emission factor calculation for unpaved roadways and parking areas in AP-42 section 13.2.2 (September, 1998) may be utilized to determine compliance. Initial compliance has been determined using inputs representing current conditions as follows:

$$E = [k(s/12)^a \times (W/3)^b] / (M/0.2)^c$$

where:

E = size-specific emission factor (lb/VMT)  
 s = silt content of road surface material (%) = 9.6 %  
 W = mean vehicle weight (tons) = 8.6  
 M = surface material moisture content (%) = 8.9%  
 a = 0.8 (dimension less constant)  
 b = 0.5 (dimension less constant)  
 c = 0.4 (dimension less constant)  
 k = 10 (dimension less constant) particle size multiplier

Therefore,  $E = 3.11 \text{ lbs particulate/VMT}$

Maximum travel = 68 VMT/year

$(68 \text{ VMT/yr})(3.11 \text{ lbs/VMT}) = 212 \text{ lbs of particulate/year}$

$(212 \text{ lbs/year})(1 \text{ ton}/2000 \text{ lbs}) = 0.11 \text{ tons of particulate uncontrolled/year}$

Assume 90% control for roadway watering

$(0.11 \text{ tons/year}) (.10) = 0.01 \text{ tons of particulate controlled/year}$

Total emissions from paved and unpaved roadways and parking areas are:

$0.01 \text{ ton} + 0.59 \text{ tons} = 0.6 \text{ tons per year}$

## F. Miscellaneous Requirements

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**Smith**

**PTI A**

**Modification Issued: 5/11/2006**

Emissions Unit ID: **F001**

None.

Smith

PTI A

Modification Issued: 5/11/2006

Emissions Unit ID: P901

**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>
P901 - 200 ton per hour concrete batch plant (weigh hopper loading and truck loading) controlled with baghouse	OAC rule 3745-31-05(A)(3)	<p>There shall be no visible particulate emissions (PE) from the exhaust stack.</p> <p>Total PE shall not exceed 3.66 lb/hr.</p> <p>Total PE shall not exceed 16.0 tons per year.</p> <p>See A.2.a - A.2.d, below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B)(1).</p>
	OAC rule 3745-17-07 (B)(1)	Fugitive visible particulate emissions shall not exceed 20 per cent opacity as a three-minute average.
	OAC rule 3745-17-07 (A) OAC rule 3745-17-08 (B) OAC rule 3745-17-11	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule

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**Smith**

**PTI A**

**Modification Issued: 5/11/2006**

Emissions Unit ID: **P901**

3745-31-05 (A)(3).

## 2. Additional Terms and Conditions

**2.a** The operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

- i. Cement/flyash weigh hopper loading
- ii. Aggregate weigh hopper loading (sand and limestone)
- iii. Weigh hopper load-out/load chute (cement and aggregate)
- iv. Truck loading

**2.b** The permittee shall employ best 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:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
i. Cement/Flyash weigh hopper loading	Cement weigh hopper dust collector (baghouse)
ii. Aggregate/Sand weigh hopper loading and unloading	Adequate moisture to control fugitive emissions
iii. Weigh hopper load-out/load chute (cement and aggregate)	Loading hood dust collection system (baghouse)
iv. Truck loading	Loading hood dust collection system (baghouse)

Nothing in this paragraph shall prohibit the permittee from employing additional 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

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**PTI Application: 06 07224**  
**Modif**

**Facility ID: 068400001**

**Emissions Unit ID: P901**

the control measure(s) is unnecessary.

- 2.d** Implementation of the above-mentioned control measure(s) 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.

**B. Operational Restrictions**

None.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall perform daily checks while the equipment is in operation for any visible particulate emissions from the fabric filter exhaust, or any visible fugitive particulate emissions from the batch plant. The presence or absence of any visible emissions from the fabric filter exhaust, and/or the batch plant shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

**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,
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented;and,
  - c. all days during which any visible emissions were observed from this emissions unit.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

1. Emission Limitation:

**Modification Issued: 5/11/2006**

There shall be no visible particulate emissions from the exhaust stack.

Compliance Method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1 and 2, above.

If required, compliance with the no visible emission limit from the exhaust of the fabric filter shall be determined using Test Method 22-like visible emission observations (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations).

2. Emission Limitation:

Particulate emissions (PE) shall not exceed 3.66 lb/hr

Compliance Method:

Compliance with the lb/hr emission limitation shall be demonstrated by the following calculations using emission factors from AP 42, Compilation of Air Pollutant Emission Factors, Chapter 11, Table 11.12-2 (issued 10/01) and, for cement/flyash, Table 11.19.2-2 (1/95).

**Cement/Flyash weigh hopper:**

Total PE = 0.0315 lb PE/ton unloaded \* 29 tons/hr \* (1 - 0.999 (manufacturer rating)) = 0.00091 lb/hr

**Aggregate/Sand weigh hopper loading and unloading:**

Aggregate: 0.0069 lb/ton of material transferred \* 194 (97 tons/hr loading and 97 tons/hr unloading) = 1.34 lb/hr

Sand: 0.0021 lb/ton of material transferred \* 148 (74 tons/hr loading and 74 tons/hr unloading) = 0.31 lb/hr

Total PE = (Aggregate) 1.34 lb/hr + (Sand) 0.31 lb/hr = 1.65 lb/hr

**Weigh hopper load-out/load chute (cement/flyash, aggregate, and sand):**

Total PE = 0.0315 lb PE/ton unloaded \* 29 tons/hr \* (1 - 0.999 (manufacturer rating)) = 0.00091 lb/hr

**Truck loading:**

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**Emissions Unit ID: P901**

Total PE = 0.61 lb PE/ton \* tons/hr \* (1 -0.999 (manufacturer rating)) = 0.0614 lb/hr

Total emissions = 1.71 lb PE/hr

3. Emission Limitation:

Particulate emissions (PE) shall not exceed 16.0 tons per year

Compliance Method:

Compliance with the TPY emission limitation shall be demonstrated by the following one time calculations using emission factors from AP 42, Compilation of Air Pollutant Emission Factors, Chapter 11, Table 11.12-2 (issued 10/01).

**Aggregate/sand transfer to weigh hopper:** Total PE = 0.0051 lb/ton of material transferred \* 255 tons/hr \* 8760 hr/yr \* 1 ton/2000 lb = 5.70 TPY

**Cement unloading to weigh hopper:** Total PE = 0.0021 lb PE/ton unloaded \* 37.5 tons/hr \* 8760 hr/yr \* 1 ton/2000 lb = 0.345 TPY

**Material transfer to mix truck:** Total PE = 0.61 lb PE/ton \* 292.5 tons/hr \* (1 -0.999 (manufacturer rating)) \* 8760 hr/yr \* 1 ton/2000 lb = 0.782 TPY

Total emissions = 6.83 TPY

4. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 per cent opacity as a three-minute average

Compliance Method:

Compliance with the fugitive visible emission limitations identified above shall be determined in accordance with Test Method 9 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 paragraph (B)(3) of OAC rule 3745-17-03.

**F. Miscellaneous Requirements**

None.

Smith

PTI A

Modification Issued: 5/11/2006

Emissions Unit ID: P902

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P902 - Material handling operations including cement transfer to silo, cement unloading, and aggregate handling with two fabric filters.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) shall not exceed 18.2 tons/yr</p> <p>The reverse air baghouse shall achieve an outlet emission rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases and no visible PE from the exhaust stack;</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d)</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08 (B).</p>
	OAC rule 3745-17-07 (B)(1)	Visible PE shall not exceed 20 per cent opacity as a three-minute average;
	OAC rule 3745-17-08 (B)	The emission limitations specified

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by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

**2. Additional Terms and Conditions**

**2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

- i. Aggregate hopper loading
  - (a) Sand
  - (b) Limestone
- ii. Aggregate hopper load-out
  - (a) Sand
  - (b) Limestone
- iii. Storage bin load-in
  - (a) Sand
  - (b) Limestone
- iv. Pneumatic cement unloading operations
  - (a) Bulk tanker to pig
  - (b) Pig to silo 1
  - (c) Pig to silo 2

**2.b** The permittee shall employ best 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:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
i. Aggregate hopper loading	
(a) Sand	Water
(b) Limestone	Water
ii. Aggregate hopper load-out	
(a) Sand	Maintain material moisture
(b) Limestone	Maintain material moisture
iii. Storage bin load-in	
(a) Sand	Maintain material moisture

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- |   |                            |
|---|----------------------------|
| (b) Limestone                             | Maintain material moisture |
| iv. Pneumatic cement unloading operations |                            |
| (a) Bulk tanker to pig                    | Reverse air baghouse       |
| (b) Pig to silo 1                         | Reverse air baghouse       |
| (c) Pig to silo 2                         | Reverse air baghouse       |

Nothing in this paragraph shall prohibit the permittee from employing additional 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** Implementation of the above-mentioned control measure(s) 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.

## **B. Operational Restrictions**

None.

## **C. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
a. Aggregate hopper loading	
i. Sand	Daily
ii. Limestone	Daily
b. Aggregate hopper load-out	
i. Sand	Daily
ii. Limestone	Daily
c. Storage bin load-in	

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|------|---------------------------------------|----------------------------------|
| i.   | Sand                                  | Daily                            |
| ii.  | Limestone                             | Daily                            |
| d.   | Pneumatic cement unloading operations |                                  |
| i.   | Bulk tanker to pig                    | Once during each unloading event |
| ii.  | Pig to silo 1                         | Once during each unloading event |
| iii. | Pig to silo 2                         | Once during each unloading event |
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
  3. The permittee shall maintain records of the following information:
    - a. the date and reason any required inspection was not performed;
    - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):
    - c. the dates the control measure(s) was (were) implemented; and
    - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
  4. The permittee shall perform daily checks while the equipment is in operation for any visible particulate emissions from the fabric filter exhaust, or any visible fugitive particulate emissions from the batch plant . The presence or absence of any visible emissions from the fabric filter exhaust, and/or the batch plant shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

#### **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;

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- b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented;and,
  - c. all days during which any visible particulate emissions were observed from this emissions unit.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### E. Testing Requirements

1. Emission Limitation:

Visible particulate emissions shall not exceed 20 per cent opacity as a three-minute average

Compliance Method:

Compliance with the visible emission limitations for the material handling operations identified above shall be determined in accordance with Test Method 9 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 paragraph (B)(3) of OAC rule 3745-17-03.

2. Emission Limitation:

Particulate emissions shall not exceed 18.2 tons/yr

Compliance Method:

Compliance with the 18.2 TPY emission limitation shall be demonstrated by the following one time calculations using emission factors from AP-42, Compilation of Air Pollutant Emission Factors, Chapter 11, Table 11.12-2 (issued 10/01):

**Aggregate transfer:** Total PE = 0.0069 lb/ton of material transferred\*  
150 tons/hr \* 8760 hr/yr \* 3 transfer points = 13.6 TPY

**Sand Transfer:** Total PE = 0.0021 lb/ton of material transferred \* 105 tons/hr \* 8760 hr/yr \* 3 transfer points = 2.90 TPY

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**Cement unloading to elevated storage silo:**  $0.00099 \text{ lb PE/ton} * 37.5 \text{ tons/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.163 \text{ TPY}$

Total PE = 16.7 tons PE/yr

3. Emission Limitation:

The reverse air baghouse shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions(PE) per dry standard cubic foot of exhaust gases and no visible particulate emissions from the exhaust stack.

Compliance Method:

Compliance shall be demonstrated through Monitoring Requirement C.5 and Reporting Requirement D.3, above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(7).

If required, compliance with the no visible emission limit from the exhaust of the fabric filter shall be determined using Test Method 22-like visible emission observations (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations).

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**F. Miscellaneous Requirements**

None.