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Facility Name: **Cement Products Inc**

Application Number: **03-3022**

Date: **July 29, 1998**

**GENERAL PERMIT CONDITIONS**

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio 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 Ohio Administrative Code

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(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 prove to be inadequate or cannot meet applicable standards.

#### PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

#### 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.

#### APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

#### 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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PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for 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.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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Concret  
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BAT  
Determination

Use of  
reasonably  
available  
control  
measures  
(RACM) and  
compliance  
with the terms  
and conditions  
of this permit

Use of a fabric  
filter and  
compliance with the  
terms and conditions  
of this permit

Use of RACM  
and compliance  
with the terms  
and conditions  
of this permit

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		3745-17-08 (B) (2)		3745-31-05
	<u>Applicable Federal &amp; OAC Rules</u>		3745-31-05	3745-17-07 (B) (1)
3745-31-05		3745-31-05	3745-17-07 (B) (1)	
		3745-17-07 (B) (1)		
3745-17-07 (B) (4)			3745-31-05 3745-17-11 (B) *	
3745-17-08 (B) (2)		3745-31-05 3745-17-11 (B) *	3745-31-05 3745-17-07 (A) *	
3745-31-05				
		3745-31-05 3745-17-07 (A) *		
			3745-17-08 (B) (3)	
3745-17-07 (B) (4)		3745-17-08 (B) (3)		

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Permit Allowable Emissions and/or Control/Usage Requirements	TPY fugitive PE	from fabric filter not to exceed 0.41 pound hour, 0.20 TPY PE	0.03 gr/DSCF or no visible emissions from fabric filter	
2.48 TPY fugitive PE	Visible emissions not to exceed 1 minute in any sixty-minute observation period	Visible emissions not to exceed 0 percent opacity, as a six-minute average from fabric filter.	<u>Transit Mix Truck Loading:</u> 1.79 TPY fugitive PE	
Visible emissions not to exceed 3 minutes in any sixty-minute observation period	* * <u>Sand and Aggregate Transfer to Storage Bin:</u>	0.03 gr/DSCF or no visible emissions from fabric filter	Visible emissions not to exceed 20 percent opacity, as a three-minute average.	
* * 0.16	* * Emissions <u>Cement Pneumatic Loading to Silo:</u>	<u>Sand and Aggregate Weigh Hopper Loading:</u> 1.49 TPY fugitive PE Visible emissions not to exceed 20 percent opacity, as a three-minute average <u>Cement Weigh Hopper Loading:</u> Emissions from fabric filter not to exceed 0.02 TPY PE Visible emissions not to exceed 0 percent opacity, as a six-minute average from fabric filter		

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\* The emission limits based on these applicable rules are less stringent than the limits established pursuant to OAC 3745-31-05.

#### SUMMARY

#### TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM	7.22

#### REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402.**

#### WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

#### MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

#### MALFUNCTION/ABATEMENT

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In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

#### **AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

#### **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.

#### **ADDITIONAL SPECIAL TERMS AND CONDITIONS**

##### **Introduction**

This Permit to Install (PTI) is for a concrete transit-mix plant, with associated roadways and storage piles.

##### **A. Applicable Emission Limitations and/or Control Requirements**

1. The permittee shall employ the following additional control requirements for emissions unit P901, to comply with the mass emission limitations and opacity restrictions established by this permit:

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a. Sand and aggregate transfer to elevated bins:

- i. The drop height of the front-end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive particulate matter from the conveyor loading area.
- ii. The sand and aggregate loaded into the elevated bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive particulate matter from the conveyor and transfer point to bins.

b. Cement unloading to storage silo:

- i. The silo shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient to eliminate visible emissions of fugitive particulate matter at the point of capture.
- ii. The collection efficiency of the fabric filters shall be sufficient to minimize or eliminate visible fugitive dust to the extent possible with good engineering design.
- iii. The fabric filters shall achieve an emissions rate of not greater than 0.03 grain of particulate emissions per dry standard cubic foot of exhaust gases, or achieve no visible emissions from the exhaust stack(s), whichever is less stringent.

c. Weigh hopper loading of sand and aggregate:

- i. The weigh hopper shall be adequately enclosed. The enclosure shall be sufficient to minimize or eliminate visible emissions of fugitive particulate matter.

d. Weigh hopper loading of cement:

- i. The weigh hopper shall be adequately enclosed. The enclosure shall be sufficient to minimize or eliminate visible emissions of fugitive particulate matter.

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- ii. The collection efficiency of the fabric filters shall be sufficient to minimize or eliminate visible fugitive dust to the extent possible with good engineering design.
    - iii. The fabric filters shall achieve an emissions rate of not greater than 0.03 grain of particulate emissions per dry standard cubic foot of exhaust gases, or achieve no visible emissions from the exhaust stack(s), whichever is less stringent.
  - e. Loading of Transit-Mix Truck:
    - i. A charging boot shall be used around the hopper choke-feed discharge area and transit-mix truck opening. The charging boot shall have a control efficiency sufficient to minimize or eliminate visible emissions of fugitive dust to the extent possible with good engineering design.
2. The permittee shall employ the following additional control requirements for the roadways and parking areas, emissions unit F001, to comply with the mass emission limitations and opacity restrictions established by this permit:

Unpaved roadways and parking areas:

- a. There shall be no visible fugitive particulate matter emissions from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.
- b. The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Water shall be used as the dust suppressant, and the following equipment shall be used for the periodic applications: transit mix-truck and/or hose/sprinkler system . The dust suppressant shall be applied to the unpaved surfaces, at a minimum, 3 times per week. This term and condition shall be waived during wet

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conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.

- c. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.
  - d. A maximum speed limit of 2 miles per hour shall be posted and enforced on the property.
  - e. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.
3. The permittee shall employ the following additional control requirements for the sand and aggregate storage piles, emissions unit F002, to comply with the mass emission limitations and opacity restrictions established by this permit:
- a. Enclosures/walls shall be maintained around the material storage piles in order to minimize the emissions of fugitive dust from wind erosion of the storage piles.

**B. Operational Restrictions**

1. The maximum annual production for the concrete batch plant, emissions unit P901, shall not exceed 200,000 tons.

**C. Monitoring and Recordkeeping Requirements**

1. The permittee shall establish and maintain a log containing the following information for emissions unit P901:
  - a. Monthly records of the emissions unit's production for the calendar year. If at any time the permittee exceeds the 200,00000 ton/yr operation restriction, the permittee shall notify the Ohio EPA Northwest District Office of the exceedance.

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- b. Daily checks for any visible particulate matter emissions from the fabric filter control systems for the cement silo and hopper, while the cement silo and hopper are in operation. The presence or absence of any visible emissions from the fabric filter control system shall be noted in an operations log. If any visible emissions are observed from the fabric filters the permittee shall submit a report to the Ohio EPA Northwest District Office in accordance with OAC rule 3745-15-06. In addition to submitting the report, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.
2. The permittee shall maintain records which include the following information for the unpaved roadways and parking areas:
  - a. The date dust suppressants were applied to the unpaved surfaces.
  - b. The portions of unpaved surfaces that were treated with dust suppressants.
  - c. The application rate of water and any chemical additives (gallons of each per square yard).
  - d. The name of the equipment operator responsible for the application of the dust suppressants.
3. 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, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all records required by the permit. Such records may be maintained in computerized form.

**D. Reporting Requirements**

1. None.

**E. Testing Requirements/ Compliance Method Determinations**

1. Compliance with the emission limitation(s) in section A of the terms and

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conditions of this permit shall be determined in accordance with the following method(s):

a. Emission Limitations for emissions unit P901

- sand and aggregate transfer to storage bin: 1.08 TPY fugitive PE; cement pneumatic loading to silo: 0.41 lb PE/hr and 0.20 TPY PE; sand and aggregate weigh hopper loading: 1.49 TPY fugitive PE; cement weigh hopper loading: 0.02 TPY PE; transit mix truck loading: 1.79 TPY fugitive PE.

Applicable Compliance Method

Compliance shall be determined by calculating the emissions from the above operations utilizing actual annual production records in accordance with the following procedures:

- i. sand and aggregate transfer to storage bin: The appropriate AP-42 emission factor from Table 11.12-2 (revised 10/86) and the control efficiency of the dust suppression shall be employed to calculate the actual rate of fugitive emissions.
- ii. cement pneumatic loading to silo: The appropriate AP-42 emission factor from Table 11.12-2 (revised 10/86) and the capture/control efficiency of the fabric filter shall be employed to calculate the actual rate of stack emissions.
- iii. sand and aggregate weigh hopper loading: The appropriate AP-42 emission factor from Table 11.12-2 (revised 10/86) shall be employed to calculate the actual rate of fugitive emissions.
- iv. cement weigh hopper loading: The appropriate AP-42 emission factor from Table 11.12-2 (revised 10/86) and the capture/control efficiency of the fabric filter shall be employed to calculate the actual rate of stack emissions.
- v. transit mix-truck loading: The appropriate AP-42 emission factor from Table 11.12-2 (revised 10/86) shall be employed

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to calculate the actual rate of fugitive emissions.

b. Emission Limitation for emissions unit P901

20 percent opacity as a 3-minute average

Applicable Compliance Method

Compliance shall be determined by visible emissions evaluations performed using procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitations for emissions unit P901

0 percent opacity as a 6-minute average (and no visible emissions where applicable)

Applicable Compliance Method

Compliance shall be determined by visible emissions evaluations performed using procedures specified in 40 CFR Part 60, Appendix A, Method 9.

d. Emission Limitation

0.27 ton of fugitive particulate matter per year from unpaved roadways and parking areas, emissions unit F001:

Applicable Compliance Method

Compliance shall be determined by calculating the emissions from the unpaved roadways and parking

areas utilizing AP-42 emission factors, section 13.2.2 (revised 1/95).

e. Emission Limitation for emissions unit F001

No visible emissions except for a period of time not to exceed three minutes during any sixty minute observation period.

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Applicable Compliance Method

Compliance shall be determined by visible emissions evaluations performed using procedures specified in 40 CFR Part 60, Appendix A, Method 22.

f. Emission Limitation

1.75 tons of fugitive particulate matter emissions per year from the storage piles, emissions unit F002:

Applicable Compliance Method

Compliance shall be determined by calculating the emissions from the storage piles utilizing AP-42 emission factors, section 13.2.4 (revised 1/95).

g. Emission Limitation for emissions unit F002

No visible emissions except for a period of time not to exceed one minute during any sixty minute observation period.

Applicable Compliance Method

Compliance shall be determined by visible emissions evaluations performed using procedures specified in 40 CFR Part 60, Appendix A, Method 22.

**F. Miscellaneous Requirements**

1. None.