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Facility Name: **LANE CONSTRUCTION CORPORATION**

Application Number: **08-3837**

Date: **April 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

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approval constitutes a violation of Ohio Administrative Code (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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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Lane Construction Company** located in **Greene** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P901	Portable concrete batch plant (central mix) tons/hour	a	3745-31-05	0.020 gr/dscf of exhaust gases from each fabric filter outlet or no visible emissions; 7.75 pounds/hour and 4.64 tons/year of particulate
			3745-17-07	less stringent than the opacity limit above
			3745-17-11	less stringent than the particulate limit above
F001	Plant roadways unpaved	b	3745-31-05	2.27 tons/year particulate; no visible emissions except for three minutes in a sixty minute

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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>
				observation period
			3745-17-07	less stringent than the opacity limit above

- a. Compliance with the allowable emission limitations and applicable OAC rules through the use of fabric filter emission controls; wet aggregate from inherent moisture content; operating hours limitations; recordkeeping and reporting.
- b. Compliance with the allowable emissions limitation and applicable rules through the use of fugitive dust control methods; recordkeeping and reporting.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate	6.91

**RECORD(S) RETENTION AND AVAILABILITY**

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records

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shall be made available to the Director, or any representative of the Director, for review during normal business hours.

#### **REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control Agency, 451 West Third Street, Dayton, OH 45422** .

#### **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**

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 **Regional Air Pollution Control Agency, 451 West Third Street, Dayton, OH 45422**.

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

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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**

**A. Operation(s)**

Equipment  
and/or  
Property

Allowable Mass Emission Limitations  
and/or Control Requirements

transfer of  
sand and  
aggregate to  
elevated bins

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 dust from the conveyor loading area

the sand and aggregate loaded into the elevated bins shall have a moisture content sufficient to minimize or eliminate visible emission of fugitive dust from the conveyor and transfer point to bins

cement and fly  
ash silos

the silo shall be adequately enclosed and vented to the fabric filter; the enclosure shall be sufficient to eliminate visible emissions of fugitive dust at the point of capture

the fabric filter shall achieve an outlet emission rate of not greater than .020 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet

weigh hopper  
loading of  
sand and

the sand and aggregate loaded into the weigh hopper shall have a moisture content sufficient to minimize or

**A. Operation(s)**

Equipment  
and/or  
Property

Allowable Mass Emission Limitations  
and/or Control Requirements

aggregate

eliminate visible emissions of fugitive dust due to transfer of sand and aggregate from elevated bins to the weigh hopper

weigh hopper  
loading of  
cement and fly  
ash

the weigh hopper shall be adequately enclosed and vented to a fabric filter; the enclosure shall be sufficient to eliminate visible emissions of fugitive dust at the point of capture

the fabric filter shall achieve an outlet emission rate of not greater than .020 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet

mixer loading  
of cement,  
sand, and  
aggregate

the mixer loading of cement, sand, fly ash, and aggregate shall be adequately enclosed and vented to a fabric filter, the enclosure shall be sufficient to eliminate visible emissions of fugitive dust at the point of capture and mixer outlet

the fabric filter shall achieve an outlet emission rate of not greater than .020 grain per dry standard cubic foot of exhaust gases or there shall be no visible emissions from the outlet

**B. Unpaved Roadways and Parking Areas**

1. There shall be no visible particulate emissions any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.

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2. The permittee shall apply water or other suitable 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. The water/dust suppressant shall be applied to the unpaved surfaces, at a minimum, twice daily. This term and condition shall be waived during wet conditions where there is sufficient moisture to prevent visible emissions of fugitive dust.
3. 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.
4. A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.
5. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.

**C. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit shall not exceed 1,200 hours.

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

1. The permittee shall perform daily checks for any visible particulate emissions from the fabric filter control systems for the weigh hopper, cement silo, fly ash silo, and the mixer while these emissions are in operation. The presence or absence of any visible emissions from each fabric filter control system shall be noted in an operations log.
2. The permittee shall maintain records which include the following information:
  - a. for the concrete batch plant:  
  
Daily records of operating hours for the emission unit; and,

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- b. for the unpaved roadways and parking areas:

The date water or other suitable dust suppressants were applied to the unpaved surfaces.

The portions of unpaved surfaces that were treated with water or dust suppressants.

The application rate of water or other suitable dust suppressants (gallons of each per square yard).

The name of the equipment operator responsible for the application of the dust suppressants.

**E. Reporting Requirements**

1. The permittee shall submit annual reports of the total operating hours for this emissions unit. These reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31 of each year.
2. The permittee shall submit, on an annual basis, a report which (a) identifies all days during which any visible particulate emissions were observed from the fabric filter control systems and (b) describes the corrective actions taken to eliminate the visible emissions. These reports shall be submitted by January 31 and July 31 of each year to the Director (the Regional Air Pollution Control Agency).

**F. Testing Requirements and Compliance Method Determinations**

1. Compliance with the emission limitations stated in this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation  
0.020 gr/dscf from fabric filters

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Applicable Compliance Method

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

b. Emission Limitation

7.75 pounds/hour particulate matter from batch plant

Applicable Compliance Method

Compliance shall be determined by totaling the following products:

**Sand and Aggregate Transfer to Elevated Bin**

The maximum hourly production rate of 480 tons/hour is multiplied by the AP-42 emission factor, 0.029 pound/ton. The resulting uncontrolled emissions rate, 13.92 pounds/hour, is then multiplied by a moisture control factor of 70 percent (1-.70), resulting in a controlled emissions rate of 4.18 pounds/hour.

**Cement and Fly Ash Unloading to Silo (Pneumatic)**

The maximum hourly production rate of 480 tons/hour is multiplied by the AP-42 emission factor, 0.27 pound/ton. The resulting uncontrolled emissions rate, 129.6 pounds/hour, is then multiplied by a fabric filter control factor of 99 percent (1-.99), resulting in a controlled emissions rate of 1.29 pounds/hour.

**Weigh Hopper Loading**

Sand and Aggregate

The maximum hourly production rate of 480 tons/hour is multiplied by the AP-42 emission factor. 0.02 pound/ton. The resulting uncontrolled emissions

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rate, 9.6 pounds/hour, is then multiplied by the percent of sand and aggregate in the weigh hopper material (72 percent) resulting in an uncontrolled emissions rate from the aggregate and sand weigh hopper of 6.91 pounds/hour. The uncontrolled rate is then multiplied by a moisture control efficiency factor of 70 percent (1-.70), resulting in a controlled emission rate of 2.07 pounds/hour.

#### Cement and Fly Ash

The maximum hourly production rate of 480 tons/hour is multiplied by the AP-42 emission factor, 0.02 pound/ton. The resulting uncontrolled emissions rate, 9.6 pounds/hour, is then multiplied by the percent of cement and fly ash in the weigh hopper material (18 percent) resulting in an uncontrolled emissions rate from the cement and fly ash weigh hopper of 1.73 pounds/hour. The uncontrolled rate is then multiplied by a fabric control efficiency factor of 99 percent (1-.99), resulting in a controlled emission rate of 0.02 pound/hour.

#### Mixer Loading

The maximum hourly production rate of 480 tons/hour is multiplied by the AP-42 emission factor, 0.04 pound/ton. The resulting uncontrolled emissions rate, 19.2 pounds/hour, is then multiplied by a fabric filter control factor of 99 percent (1-.99), resulting in a controlled emissions rate of 0.19 pound/hour.

#### c. Emission Limitation

4.64 tons/year of particulate matter

#### Applicable Compliance Method

The 4.64 tons/year emissions limitation was developed by multiplying the 7.75 pounds/hour emissions limitation by a maximum annual operating schedule of 1,200 hours. Therefore, compliance shall be based upon the 12-month summation of the

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number of operating hours times the 7.75 pounds/hour emissions limitation, divided by 2,000 pounds/ton.

d. Emission Limitation

No visible emissions.

Applicable Compliance Method

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in US EPA Method 22.

e. Emission Limitation

No visible emissions except for three minutes in a sixty minute observation period.

Applicable Compliance Method

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in US EPA Method 22.

**G. Preventive Maintenance and Malfunction Abatement Plan (PM and MAP)**

1. This facility shall initiate and implement an inspection and maintenance program designed to help ensure the control equipment is operating in accordance with the manufacturer's specifications. Such a PM and MAP shall outline the specific steps taken and/or the specific items checked on a routine basis to ensure optimum operation of the baghouses. The PM and MAP shall be in writing and shall be submitted to the Regional Air Pollution Control Agency 90 days upon issuance of the permit to install.

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**H. Notice to Relocate a Portable or Mobile Source**

1. Pursuant to Ohio Administrative Code (OAC) rule 3745-31-01(A)(1)(p), the owner or operator of a portable or mobile source may relocate within the State of Ohio without first obtaining a Permit to Install providing the following criteria are met:
  - a. the portable source is equipped with the best available control technology for such portable source;
  - b. the portable source is operating pursuant to a currently effective Permit to Operate;
  - c. the applicant has provided proper notice of intent to relocate the portable source to the Director within a minimum of thirty days prior to the scheduled relocation; and,
  - d. in the Director's judgment, the proposed site is acceptable under rule 3745-15-07 of the Administrative Code.
  
2. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p), the owner or operator of a portable or mobile source may relocate within the State of Ohio without first obtaining a Permit to Install providing the following criteria of OAC rule 3745-31-05(F) are met:
  - a. the portable source owner or operator possesses an Ohio EPA Permit to Install, Permit to Operate or Registration Status;
  - b. the portable source is equipped with best available technology;
  - c. the portable source owner has identified the proposed site to Ohio EPA;
  - d. Ohio EPA has determined that the portable source, at the proposed site, will have an acceptable environmental impact;

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- e. a public notice, consistent with Chapter 3745-47 of the Administrative Code, is published in the county where the proposed site is located;
  - f. the owner of the proposed site has provided the portable source owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable source to this proposed site; and,
  - g. the portable source owner has provided Ohio EPA with fifteen days written notice of the relocation.
3. Any site approvals issued by Ohio EPA shall be valid for no longer than three years and are subject to renewal.
4. In order for the Director to determine compliance with all of the above criteria, the owner or operator of the portable or mobile source must file a "Notice of Intent to Relocate," within the specified time frame (30 or 15 days), prior to the relocation of the source with the Regional Air Pollution Control Agency, 451 W. Third Street, Dayton, OH 45422. Upon receipt of the notice, the Director, or the Director's authorized representative, will evaluate the request in accordance with the above criteria.
5. Failure to submit said notification and to receive Ohio Environmental Protection Agency approval prior to relocation of the source may result in fines and civil penalties.