



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
CLERMONT 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: 14-05589**

**Fac ID: 1413020182**

**DATE: 8/12/2004**

Moraine Materials, Inc. Plant 25  
Charles Rigsby  
1400 Commerce Center Drive  
Franklin, OH 45005

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

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

cc: USEPA

HCDES



**Permit To Install  
Terms and Conditions**

**Issue Date: 8/12/2004  
Effective Date: 8/12/2004**

**FINAL PERMIT TO INSTALL 14-05589**

Application Number: 14-05589  
Facility ID: 1413020182  
Permit Fee: **\$1250**  
Name of Facility: Moraine Materials, Inc. Plant 25  
Person to Contact: Charles Rigsby  
Address: 1400 Commerce Center Drive  
Franklin, OH 45005

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**2727 Moraine Way  
Batavia, Ohio**

Description of proposed emissions unit(s):  
**Concrete Batch Plant.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

#### **10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

#### **11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

#### **12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

#### **13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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**Moraine Materials, Inc. Plant 25**  
**PTI Application: 14-05589**  
**Issued: 8/12/2004**

**Facility ID: 1413020182**

**Moraine Materials, Inc. Plant 25**

**PTI Application: 14-05589**

**Issued: 8/12/2004**

**Facility ID: 1413020182**

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	4.1
PM10	1.38

**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>
P901 - 400 TPH Concrete Batch Plant - Modification - Transfer of sand and aggregate to elevated bins	Cement silo with fabric filter OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(B)(11)(d)
Weigh hopper loading of cement, sand and aggregate vented to the cement silo	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(A)(1)
Transit mix truck loading w/ enclosure	
	OAC rule 3745-17-07(B)(11)(d)
	OAC rule 3745-17-11(B)(1)

	OAC rule 3745-17-11(B)(1)	<u>Applicable Emissions  Limitations/Control Measures</u>
OAC rule 3745-31-05(A)(3)		4.55 lbs/hr PM 1.14 TPY PM 2.17 lbs/hr PM-10 0.54 TPY PM-10  See terms and conditions A.2.a, A.2.c and A.2.d.
OAC rule 3745-17-07(A)(1)		Exempt  1.63 lbs/hr PM 0.41 TPY PM 0.77 lb/hr PM-10 0.19 TPY PM-10
OAC rule 3745-17-11(B)(1)		See terms and conditions A.2.b through A.2.d.  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 3745-31-05(A)(3)		Exempt  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(A)(1)		0.28 lb/hr PM 0.07 TPY PM 0.15 lb/hr PM-10 0.04 TPY PM-10
OAC rule 3745-17-07(B)(11)(d)		

**Morai**  
**PTI A**  
**Issued: 8/12/2004**

Emissions Unit ID: **P901**

See terms and conditions A.2.b through A.2.d.

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).

9.91 lbs/hr PM  
2.48 TPY PM  
2.44 lbs/hr PM-10  
0.61 TPY PM-10

See terms and conditions A.2.b through A.2.d.

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

Exempt

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

## **2. Additional Terms and Conditions**

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

**2.b** The silo shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point of capture.

All fabric filters shall achieve an outlet particulate emissions rate of 0.030 gr/dscf or shall have no visible particulate emissions from the exhaust stack.

If complying with the grains/dscf emissions limit then the visible particulate emissions limit from any stack shall not exceed 20% opacity as a six-minute average.

**2.c** Fugitive visible particulate emissions from any operation associated with emissions unit P901 shall not exceed twenty percent opacity as a three-minute average.

**2.d** The hourly emissions limitations are based upon the emissions unit's Potential to Emit. Therefore, no hourly records are required to demonstrate compliance with these limits.

**2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the maintenance of the sand and aggregate in a moist condition, the use of enclosures and a fabric filter on the cement silos, compliance with the operational restriction and the production limitation and compliance with the visible and mass emissions limitations.

## **B. Operational Restrictions**

1. The pressure drop across each fabric filter shall be maintained within the range of 6-12 inches of water while the emissions unit is in operation.

2. The maximum concrete production rate for this emissions unit shall not exceed 200,000 tons per year.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each fabric filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each fabric

filter on a daily basis.

- 2. The permittee shall maintain monthly records of the amount of concrete produced in this emissions unit.

**D. Reporting Requirements**

- 1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of all periods of time during which the pressure drop across each fabric filter did not comply with the allowable range specified in term B.1. A copy of such record (pressure drop deviation (excursion) report) shall be sent to the Director within 45 days after the exceedance occurs.
- 2. The permittee shall submit annual reports that identify any exceedances of the annual production rate limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

- 1. Compliance with the emission and production limitations in Section A. and B. of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations

4.55 lbs/hr; 1.14 TPY PM	Sand/aggregate transfer to elevated bins
2.17 lbs/hr; 0.54 TPY PM-10	Sand/aggregate transfer to elevated bins
1.63 lbs/hr; 0.41 TPY PM	Cement, sand and aggregate weigh hopper loading
	vented to silo with fabric filter
0.77 lb/hr; 0.19 TPY PM-10	Cement, sand and aggregate weigh hopper loading
	vented to silo with fabric filter
0.28 lb/hr; 0.07 TPY PM	Unloading to cement silos with fabric filter
0.15 lb/hr; 0.04 TPY PM-10	Unloading to cement silos with fabric filter

Applicable Compliance Method

Compliance with the particulate emissions limitations in term and condition A.1. shall be determined in a calculation using the applicable emission factors from AP-42, Fifth Edition, Chapter 11.12, Concrete Batching (October 2001), multiplied by the actual process rate in tons material per hour and tons material per year.

b. Emissions Limitations

9.91 lbs/hr; 2.48 TPY PM	Transit mix truck loading w/ fabric filter
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2.44 lbs/hr; 0.61 TPY PM-10

Transit mix truck loading w/ fabric filter

Applicable Compliance Method

Compliance with the particulate emissions limitations in term A.1. shall be determined in a calculation using the applicable uncontrolled emission factors from AP-42, Fifth Edition, Chapter 11.12, Concrete Batching (October 2001), multiplied by the actual process rate in tons material per hour and tons material per year and by 29 percent, which accounts for the overall control efficiency due to control with a fabric filter.

c. Emissions Limitations

Particulate emissions from the fabric filter outlet stack associated with P901 shall achieve an outlet particulate emissions rate of 0.030 gr/dscf or have no visible emissions.

If complying with the grains/dscf emissions limit then the visible particulate emissions limit from any stack shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method

Compliance with the mass emission limitation shall be determined in accordance with Test Methods 1-5 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.

Compliance with the visible emission limitation 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.

d. Emissions Limitations

Fugitive visible particulate emissions from any operation associated with emissions unit P901 shall not exceed twenty percent opacity as a three-minute average, except as specified by rule.

Applicable Compliance Method

Compliance 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.

e. Operational limitation

The pressure drop across each fabric filter shall be maintained within the range of 6-12 inches of water while the emissions unit is in operation.

Applicable Compliance Method

Compliance with the operational limitation in term and condition B.1. shall be determined by the monitoring and records maintained pursuant to term and condition C.1.

f. Production limitation

The maximum allowable concrete production rate shall not exceed 200,000 tons per year.

Applicable Compliance Method

Compliance with the production limitation in term and condition B.2. shall be determined by the records maintained pursuant to term and condition C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions listed in this permit to install shall supercede all air pollution control requirements for this emissions unit contained in permit to install number 18-070, as issued on September 18, 1978.