



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-22844

Fac ID: 0228000079

DATE: 1/15/2008

Fairmount Mineral Ltd, Best Sand Facilit
Mark Schiefelbein
11830 Ravenna Rd
Chardon, OH 44024

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

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 1/15/2008
Effective Date: 1/15/2008**

FINAL PERMIT TO INSTALL 02-22844

Application Number: 02-22844
Facility ID: 0228000079
Permit Fee: **\$400**
Name of Facility: Fairmount Mineral Ltd, Best Sand Facilit
Person to Contact: Mark Schiefelbein
Address: 11830 Ravenna Rd
Chardon, OH 44024

Location of proposed air contaminant source(s) [emissions unit(s)]:
**11830 Ravenna Rd
Munson, Ohio**

Description of proposed emissions unit(s):
Open mouth bag plant.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

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the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	6.18
Fugitive Emissions	41.39

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 - (P014) - Open Mouth Bag Plant

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 6.18 tons per year from the baghouse associated with this emissions unit. Fugitive emissions generated from this emissions unit shall not exceed 41.39 tons per year.
OAC rule 3745-17-07 (A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, subpart 000.
OAC rule 3745-17-07 (B)(1)	Exempt. See section A.2.a of these terms and conditions.
OAC rule 3745-17-08 (B)	Exempt. See section A.2.b of these terms and conditions.
OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
40 CFR Part 60, subpart 000	See sections from A.2.c to A.2.e of these terms and conditions.

2. Additional Terms and Conditions

- 2.a. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07 (B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08 (B).
 - 2.b. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08 (B).
 - 2.c. In accordance with 40 CFR §63.672(a)(1), the permittee shall not cause to be discharged into the atmosphere from the bagging operation any stack emissions which contain particulate matter in excess of 0.022 grain per dry standard cubic

foot (gr/dscf).

- 2.d.** In accordance with 40 CFR §63.672(a)(2), the permittee shall not cause to be discharged into the atmosphere from the bagging operation any stack emissions which exhibit greater than seven percent (7%) opacity.
- 2.e.** In accordance with 40 CFR §63.672(b), the permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from the scalping screen associated with this emissions unit any fugitive emissions which exhibit greater than 10 percent (10%) opacity.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall properly install, operate and maintain equipment to monitor the pressure drop across the baghouse while this 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.
- 2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.
- 3. The permittee shall record the pressure drop across the baghouse on a weekly basis.

D. Reporting Requirements

- 1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section C.2 of these terms and conditions.

E. Testing Requirements

- 1. Compliance with the emission limitations specified in section A of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation: 0.022 gr/dscf

Emissions Unit ID: **P014**

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in section E.2 of these terms and conditions.

- b. Emission Limitation: 7% opacity from stack

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

- c. Emission Limitation: 10% opacity of fugitive emissions from any transfer points on belt conveyors and scalping screen operation

Applicable Compliance Method:

The permittee shall use Method 9 and procedures in 40 CFR Part 60, Appendix A, with the following addition:

- i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet);
- ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

- d. Emission Limitation: 6.18 tons/yr of Particulate from stack

Applicable Compliance Method:

The tons per year emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.022 grain/sdcf) by the maximum annual operation hours of 8,760 hours per year, baghouse exit gas flow rate of 7,500 cubic foot per minute, and 60 minutes per hour, and divided by 2,000 pounds per ton and 7,000 grains per pound. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

- e. Emission limitation: 41.39 tons/yr of fugitive

Applicable Compliance Method:

To determine the actual worst case fugitive particulate emissions, the following equation shall be used:

$$E = (MP)(EF)(OT)/(2,000 \text{ lbs/ton})$$

Where,

E = Fugitive particulate emissions, in tons per year;

Emissions Unit ID: **P014**

MP = the maximum process weight rate of this emissions unit = 30 tons/hr; and
EF = the emission factors = 0.315, (0.30 lb/ton + 5X0.0030 lb/ton), of sand processed, AP - 42, April 2004, Table 11.19.2-2, where, 0.30 lb/ton for fines screening and 0.0030 lb/ton for conveyor transfer point with 5 transfer points; and
OT = Annual operating hours = 8,760 hours per year maximum.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within three months after insurance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions of 0.022 grain per dry standard cubic foot (gr/dscf) from stack.
 - c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rate: Method 5 or Method 17. The sample volume shall be at least 1.70 dscm (60 dscf).
 - d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

No later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be

Emissions Unit ID: **P014**

permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal fo the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

F. Miscellaneous Requirements

None

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Emissions Unit ID: **P014**

SIC CODE SCC CODE EMISSIONS UNIT ID
 EMISSIONS UNIT DESCRIPTION
 DATE INSTALLED

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.02 gr/dscf	5.65	1.41 lbs/hr	6.18
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination: 6.18 tons/yr of particulate emissions from the bagging operation baghouse stack and 41.39 tons per year of fugitive dust emissions. The basis for the determination is the knowledge of process, engineering analysis, and regulations governing this emissions unit.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES NO

IDENTIFY THE AIR CONTAMINANTS: _____