



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
COLUMBIANA 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: 17-1646**

**DATE: November 24, 1999**

Alpine Minerals, Inc.  
Gary Sosenko  
11553 Shag Bark Trail  
Strongsville, OH 44136

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  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA  
DAPC, NEDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install**

**Issue Date: November 24, 1999**

**FINAL PERMIT TO INSTALL 17-1646**

Application Number: 17-1646  
APS Premise Number: 1715020336  
Permit Fee: **\$3000**  
Name of Facility: Alpine Minerals, Inc.  
Person to Contact: Gary Sosenko  
Address: 11553 Shag Bark Trail  
Strongsville, OH 44136

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1250 Saint George Street**  
**East Liverpool, Ohio**

Description of proposed emissions unit(s):  
**NON-METALLIC MINERAL PROCESSING FACILITY INCLUDING CRUSHING, GRINDING,  
MATERIAL TRANSFER AND HANDLING, AND STORAGE SILOS.**

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



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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 Related to Monitoring and Recordkeeping 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 are inadequate 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 prove to be inadequate 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

**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 thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

**Alpine Minerals, Inc.**  
 PTI Application: **17-1646**  
**19991124**

Facility ID: **1715020336**

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(Process)	21.7
PM(Combustion)	0.09
NOX(Combustion)	1.25
CO(Combustion)	1.05
OC(Combustion)	0.07

**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>	Fuel burning equipment	<u>Applicable Rules/Requirements</u>
Primary grinding system equipped with a fabric filter for particulate control.		OAC rule 3745-31-05(A)(3)
		OAC rule 3745-17-11
		OAC rule 3745-17-07
		40 CFR 60 Subpart OOO

OAC rule 3745-17-10(A)(1)

Applicable Emissions  
Limitations/Control Measures

Particulate matter emissions: 0.02 grains/dscf, 0.86 pound per hour and 3.75 tons per year.

OC emissions from natural gas combustion: 0.016 pound per hour and 0.07 ton per year.

NOx emissions from natural gas combustion: 0.28 pound per hour and 1.25 tons per year.

CO emissions from natural gas combustion: 0.24 pound per hour and 1.05 tons per year.

See Additional Terms and Conditions A.2.a.

See Additional Terms and Conditions A.2.b.

See Additional Terms and Conditions A.2.c.

Visible emissions shall not exceed 7 percent opacity.

Particulate matter emissions: 0.02 pound per million Btu of actual heat input and 0.26 ton per year.

## 2. Additional Terms and Conditions

2.a. The emissions limit based on OAC rule 3745-17-11 is less stringent than the limit

established pursuant to OAC rule 3745-31-05(A)(3).

- 2.b. The emissions limit based on OAC rule 3745-17-07 is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c. The emissions limit based on 40 CFR 60, Subpart OOO is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).

## **B. Operational Restrictions**

1. The collection efficiency of the air pollution capture hoods for emissions unit P001 shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition. The collection efficiency shall be considered adequate if visible particulate emissions of fugitive dust do not exceed 10% opacity as a six-minute average.
2. The pressure drop across the fabric filter shall be maintained within the range of 2 to 3 inches of water while the emissions unit is in operation.
3. The permittee shall regularly maintain the fabric filter control equipment associated with this emissions unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and/or replacement of filters so as to maximize the particulate collection efficiency of this dust control system.

## **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 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 the baghouse on a daily basis.
2. The permittee shall maintain monthly records of the operating hours for this emissions unit.

## **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 above.

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**Alpine**  
PTI A1  
**19991124**

Emissions Unit ID: **P001**

## **E. Testing Requirements**

1. Emission Limitation:  
0.02 grains/dscf and 0.86 pounds per hour of particulate matter

Applicable Compliance Method:

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 90 days after startup.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA Northeast District Office shall be permitted to witness the test(s), 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(s) shall be signed by the person or persons responsible for the tests and submitted to the

**Alpine Minerals, Inc.**  
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**19991**

Facility ID: **1715020336**

Emissions Unit ID: **P001**

Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

2. Emission Limitation:  
3.75 tons per year of particulate matter

Applicable Compliance Method:

Annual particulate matter emissions shall be determined by multiplying the annual number of hours the emissions unit operated by particulate matter emission rate determined by the compliance test and then dividing by 2,000 pounds per ton.

3. Emission Limitation:  
7% opacity for visible particulate matter emissions

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA reference method 9.

4. Emission Limitation:  
0.02 pound per million Btu of particulate matter

Applicable Compliance Method:

To determine the actual particulate matter emission rate for natural gas combustion, emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98) shall be used.

5. Emission Limitation:  
0.26 ton per year of particulate matter

Applicable Compliance Method:

Compliance shall be based on the annual hours of operation for this emissions unit and emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98).

6. Emission Limitation:  
0.28 pound per hour of NOx emissions

Applicable Compliance Method:

To determine the actual NOx emission rate for natural gas combustion, emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98) shall be used.

7. Emission Limitation:  
1.25 tons per year of NOx emissions

Applicable Compliance Method:

Compliance shall be based on the annual hours of operation for this emissions unit and emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98).

8. Emission Limitation:  
0.24 pound per hour of CO emissions

Applicable Compliance Method:

To determine the actual CO emission rate for natural gas combustion, emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98) shall be used.

9. Emission Limitation:  
1.05 tons per year of CO emissions

Applicable Compliance Method:

Compliance shall be based on the annual hours of operation for this emissions unit and emission factors outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 3/98).

## **F. Miscellaneous Requirements**

None.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]**

**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>
Secondary grinding system equipped with a fabric filter for particulate control.	OAC rule 3745-31-05(A)(3)	Particulate matter emissions: 0.02 grains/dscf, 2.57 pounds per hour and 11.3 tons per year.
	OAC rule 3745-17-11	See Additional Terms and Conditions A.2.a.
	OAC rule 3745-17-07	See Additional Terms and Conditions A.2.b.
	40 CFR 60 Subpart OOO	See Additional Terms and Conditions A.2.c.
		Visible emissions shall not exceed 7 percent opacity.

**2. Additional Terms and Conditions**

- 2.a. The emissions limit based on OAC rule 3745-17-11 is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b. The emissions limit based on OAC rule 3745-17-07 is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c. The emissions limit based on 40 CFR 60, Subpart OOO is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).

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**Alpine**  
PTI A1  
**19991124**

Emissions Unit ID: **P002**

**B. Operational Restrictions**

1. The collection efficiency of the air pollution capture hoods for emissions unit P002 shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition. The collection efficiency shall be considered adequate if visible particulate emissions of fugitive dust do not exceed 10% opacity as a six-minute average.
2. The pressure drop across the fabric filter shall be maintained within the range of 2 to 3 inches of water while the emissions unit is in operation.
3. The permittee shall regularly maintain the fabric filter control equipment associated with this emissions unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and/or replacement of filters so as to maximize the particulate collection efficiency of this dust control system.

**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 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 the baghouse on a daily basis.
2. The permittee shall maintain monthly records of the operating hours for this emissions unit.

**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 above.

**E. Testing Requirements**

1. Emission Limitation:  
0.02 grains/dscf and 2.57 pounds per hour of particulate matter

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 90 days after startup.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA Northeast District Office shall be permitted to witness the test(s), 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(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

2. Emission Limitation:  
11.3 tons per year of particulate matter

Applicable Compliance Method:

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**19991**

Facility ID: **1715020336**

Emissions Unit ID: **P002**

Annual particulate matter emissions shall be determined by multiplying the annual number of hours the emissions unit operated by particulate matter emission rate determined by the compliance test and then dividing by 2,000 pounds per ton.

3. Emission Limitation:  
7% opacity for visible particulate matter emissions

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA reference method 9.

#### **F. Miscellaneous Requirements**

None.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]****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>
Loading stations (bagging machine, supersack and truck load-out), pneumatic conveyor lines and 2 storage silos equipped with a fabric filter for particulate control.	OAC rule 3745-31-05(A)(3)	Particulate matter emissions: 0.02 grains/dscf, 1.11 pounds per hour and 4.88 tons per year.
	OAC rule 3745-17-11	See Additional Terms and Conditions A.2.a.
	OAC rule 3745-17-07	See Additional Terms and Conditions A.2.b.
	40 CFR 60 Subpart OOO	See Additional Terms and Conditions A.2.c.
		Visible emissions shall not exceed 7 percent opacity.

**2. Additional Terms and Conditions**

- 2.a. The emissions limit based on OAC rule 3745-17-11 is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b. The emissions limit based on OAC rule 3745-17-07 is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c. The emissions limit based on 40 CFR 60, Subpart OOO is less stringent than the limit

**Alpine Minerals, Inc.**  
PTI Application: ~~17-1646~~  
**19991**

Facility ID: **1715020336**

Emissions Unit ID: **P003**

established pursuant to OAC rule 3745-31-05(A)(3).

**B. Operational Restrictions**

1. The collection efficiency of the air pollution capture hoods for emissions unit P003 shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition. The collection efficiency shall be considered adequate if visible particulate emissions of fugitive dust do not exceed 10% opacity as a six-minute average.
2. The pressure drop across the fabric filter shall be maintained within the range of 3 to 6 inches of water while the emissions unit is in operation.
3. The permittee shall regularly maintain the fabric filter control equipment associated with this emissions unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and/or replacement of filters so as to maximize the particulate collection efficiency of this dust control system.

**4. Operational Restrictions Concerning the Use of Dust Suppressants**

When a dust suppressant is used for controlling fugitive dust from the unpaved road segments and parking areas, the following restrictions shall be followed:

- a. The permittee shall certify or possess certification that all dust suppressants used to control fugitive dust meet the PCB limitations set forth in 40 CFR 761, and that there are no listed hazardous wastes or characteristic hazardous wastes as set forth in 40 CFR 261.
- b. The permittee shall not apply used oil as defined by OAC rule 3745-279-01(A)(12) as a dust suppressant.
- c. The dust suppressant shall be applied in such a manner as to prevent pollution of waters of the State as required by the Ohio Revised Code, section 6111.

**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 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 the baghouse on a daily basis.

2. The permittee shall maintain monthly records of the operating hours for this emissions unit.

**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 above.

**E. Testing Requirements**

1. Emission Limitation:  
0.02 grains/dscf and 1.11 pounds per hour of particulate matter

Applicable Compliance Method:

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 90 days after startup.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data

Emissions Unit ID: **P003**

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(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

2. Emission Limitation:  
4.88 tons per year of particulate matter

Applicable Compliance Method:

Annual particulate matter emissions shall be determined by multiplying the annual number of hours the emissions unit operated by particulate matter emission rate determined by the compliance test and then dividing by 2,000 pounds per ton.

3. Emission Limitation:  
7% opacity for visible particulate matter emissions

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA reference method 9.

## **F. Miscellaneous Requirements**

None.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]****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>
Unpaved roadways and parking areas	OAC rule 3745-31-05(A)(3)	Particulate matter emissions: 1.72 tons per year  No visible particulate emissions except for 3 minutes during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.g).
	OAC rule 3745-17-07(B)(5)	Less stringent than the above-mentioned visible emission limitation
	OAC rule 3745-17-08(B), (B)(2)	Less stringent than the above-mentioned control measure requirements

**2. Additional Terms and Conditions**

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

unpaved roadways:

All unpaved roadways and parking areas

unpaved parking areas:

All unpaved roadways and parking areas

- 2.b. 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 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.c. 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 an 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.d. 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 using appropriate dust control measures 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 a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
- 2.e. 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.

Emissions Unit ID: F001

- 2.f. 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.g. 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(A)(3).

**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 unpaved roadways and parking areas in accordance with the following frequencies:

<u>unpaved roadways</u>	<u>minimum inspection frequency</u>
All unpaved roadways	Daily
<u>unpaved parking areas</u>	<u>minimum inspection frequency</u>
All unpaved parking areas	Daily

- 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 may, upon receipt of written approval from the appropriate Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- 4. 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 4.d. 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.
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 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 Limit:  
1.72 tons per year particulate matter

**Alpine Minerals, Inc.**  
PTI Application: **17-1646**  
**19991**

Facility ID: **1715020336**

Emissions Unit ID: **F001**

Applicable Compliance Method:

Compliance shall be based on hours of operation and emission factors outlined in AP-42, Section 13.2.2 (Fifth Edition).

**F. Miscellaneous Requirements**

None.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]****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>
Load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	Particulate matter emissions: 0.08 tons per year.  No visible emissions except for one minute in any hour.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b, A.2.c and A.2.f).
Load-in and load-out of storage piles, and wind erosion from storage piles	OAC rule 3745-17-07(B)(6)	Less stringent than the above-mentioned visible emission limitation.
	OAC rule 3745-17-08(B), (B)(6)	Less stringent than the above-mentioned control measure requirements.

**2. Additional Terms and Conditions**

- 2.a. The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

All storage piles

- 2.b. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles 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 employ enclosures and process material with an inherently high moisture content at the load-in and load-out operations to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles 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 employ enclosures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.
- 2.f. Implementation of the above-mentioned control measures 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(A)(3).

## **B. Operational Restrictions**

None.

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

1. Except as otherwise provided in this section, the permittee shall perform inspections of

Emissions Unit ID: F002

each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
All storage piles	Daily

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
All storage piles	Daily

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
All storage piles	Daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity 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.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
- 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, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), 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.
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 visible emission limitations for the storage piles 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)(c) of OAC rule 3745-17-03.

2. Emission Limit:  
 0.08 tons per year particulate matter

Applicable Compliance Method:

Compliance shall be based on hours of operation and emission factors outlined in AP-42, Section 13.2.4 (Fifth Edition), using the following equation:

$$EF \text{ (lb/ton)} = k * (0.0032) * [(U/5)^{1.3} / (M/2)^{1.4}]$$

Where: EF = emission factor (lb/ton)

k = particle size multiplier (0.74 - PM)

U = mean wind speed (10 mph for Youngstown area)

M = material moisture content (%)

$$E \text{ (tons/yr)} = \frac{EF * \text{Maximum production (ton/hr)} * \text{Annual hours of operation (hr/yr)}}{2,000 \text{ pounds per ton}}$$

#### F. Miscellaneous Requirements

None.