

## Air Quality Permit

Issued to: Montana Limestone Company  
P.O. Box 5540  
Bismarck, ND 58506-5540

Permit #2331-02  
Administrative Amendment (AA)  
Request Received: 06/20/03  
Department Decision on AA Issued: 07/17/03  
Permit Final: 08/02/03  
AFS#: 009-0001

An air quality permit, with conditions, is hereby granted to Montana Limestone Company (Montana Limestone), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

#### A. Plant Location

Montana Limestone's limestone processing facility is located in Section 16, Township 9 South, Range 25 East, near Warren, Montana, in Carbon County.

#### B. Current Permit Action

On June 20, 2003, Montana Limestone submitted a request to the Department of Environmental Quality (Department) for an administrative amendment to clarify that Montana Limestone was purchased by, and is a subsidiary of, Dakota Coal Company with a corresponding change of address. The permit format and rule references have also been updated.

### Section II: Limitations and Conditions

#### A. Operational Requirement

1. Montana Limestone shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
2. Montana Limestone shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
3. Montana Limestone shall treat all unpaved portions of the haul roads, access roads, parking lots, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.2 (ARM 17.8.308).
4. Montana Limestone shall comply with all applicable standards and limitations and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart 000 (ARM 17.8.340 and 40 CFR 60, Subpart 000).

#### B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department may require testing (ARM 17.8.105).
- C. Operational Reporting Requirements
1. Montana Limestone shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.  
  
Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request and shall be in the units required by the Department. This information is required for the annual emission inventory and to verify compliance with permit limitations (ARM 17.8.505).
  2. Montana Limestone shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745(1) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.  
  
The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
  3. All records compiled in accordance with this permit must be maintained by Montana Limestone as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

### Section III: General Conditions

- A. Inspection - Montana Limestone shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if the recipient fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving the permittee of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions, or requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement as specified in Section 75-2-401 *et seq.*, Montana Code Annotated (MCA).

- E. Appeals - Any person or persons who are jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, the continuing validity of this permit is conditional upon the payment by the permittee of an annual operation fee, as required by that section and rules adopted thereunder by the Board.
- H. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- I. Montana Limestone shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that has a Department approved permitting program.

Permit Analysis  
Montana Limestone Company.  
Permit #2331-02

I. Introduction/Process Description

A. Permitted Equipment

Montana Limestone Company (Montana Limestone) operates a Fine Grind Mill near Warren, Montana, in Carbon County. This facility includes a fine grind mill and associated baghouse.

B. Source Description

The Montana Limestone Fine Grind Mill further processes limestone product that is obtained from the Montana Limestone quarry located east of Warren, Montana. This facility is located in Section 16, Township 9 South, Range 25 East, near Warren Montana in Carbon County.

C. Permit History

On January 14, 1987, Big Horn Transportation Company submitted a permit application to operate a hydraulic/gravity separation wash plant for an open-pit placer mining operation. **Permit #2331** was issued by the Department of Environmental Quality (Department) on May 8, 1987.

On July 13, 2000, Big Horn Transportation Company requested that the Department transfer Permit #2331 from the Big Horn Transportation Company to Montana Limestone. The Department updated the permit to reflect that change and updated the permit format and rule references. Permit **#2331-01** replaced Permit #2331.

D. Current Permit Action

On June 20, 2003, Montana Limestone submitted a request to the Department for an administrative amendment to clarify that Montana Limestone was purchased by, and is a subsidiary of, Dakota Coal Company with a corresponding change of address. The permit format and rule references have also been updated, which included the correction of the rule reference for Standards of Performance for New Stationary Sources (NSPS) applicability. The correct reference in the permit is 40 CFR 60, Subpart OOO, Nonmetallic Mineral Processing Plants, rather than Subpart LL. Permit **#2331-02** replaces Permit #2331-01.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that may apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available from the Department upon request. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations, or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Codes Annotated (MCA).

Montana Limestone shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Montana Limestone must comply with the appropriate ambient air quality standards.

C. ARM 17.8 Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate. (2) Under this rule, Montana Limestone shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
  3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
  4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate in excess of the amount set forth in this section.
  5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
  6. ARM 17.8.340 Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). Montana Limestone is considered an NSPS affected facility under 40 CFR 60 and subject to the requirements of Subpart OOO, Nonmetallic Mineral Processing Plants.
- D. ARM 17.8 Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
1. ARM 17.8.504 Air Quality Permit Application Fees. Montana Limestone shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. The current permitting action is considered an administrative action; therefore, an application fee is not required.
  2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.
 

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit, issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which pro-rate the required fee amount.
- E. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter or use any air contaminant sources that have the potential to emit greater than 25 tons per year of any pollutant. Montana Limestone has the potential to emit more than 25 tons per year of PM<sub>10</sub>; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Montana Limestone was not required to submit an application for the current permit action because it is an administrative action.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT review was not required for the current permit action because there are no new or modified sources permitted as part of this action.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Montana Limestone of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
  13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
  14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
  2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow. This facility is not a listed source and does not meet the definition of a major source under the Prevention of Significant Deterioration (PSD) rules. Therefore, the facility is not subject to the PSD permitting program.
- G. ARM 17.8, Sub-Chapter 12 - Operating Permit Program, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. Potential to Emit (PTE) > 100 tons/year of any pollutant;
    - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
    - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2331-02 for the Montana Limestone facility, the following conclusions were made:
- The facility's PTE is less than 100 tons/year for any pollutant.
  - The facility's PTE is less than 10 tons/year of any one HAP, and less than 25 tons/year of a combination of all HAPs.
  - The source is not located in a serious PM<sub>10</sub> nonattainment area.
  - The facility is subject to 40 CFR 60, Subpart OOO.
  - The facility is not subject to any current NESHAP standards.
  - The facility is not an EPA designated Title V source.

Based on these facts, the Department determined that Montana Limestone is a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating permit in the future, Montana Limestone will be required to obtain a Title V Operating Permit.

### III. BACT Determination

A BACT determination is required for each new or altered source. Montana Limestone shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT review was not required for this permit action because it is an administrative amendment.

### IV. Emission Inventory

Table 1 lists the current estimated particulate emissions for Montana Limestone. The emission control techniques shown were previously determined to represent BACT for this project. Table 2 lists the estimated gaseous pollutant emissions from diesel exhaust associated with the project.

TABLE 1. PARTICULATE EMISSION INVENTORY

Source	Uncontrolled Emissions (Ton/year)	Controls (BACT)	Controlled Emissions	
			%	(Ton/year)
Disturbed Areas	7.17	Revegetation	75	1.79
Topsoil Removal	0.21	Minimize Fall Distance	0	0.21
Ore Removal	4.50	Minimize Fall Distance	0	4.50
Ore Dumping	4.50	Minimize Fall Distance	0	4.50
Haul Roads – Ore	30.95	Watering	50	15.48
Vehicle Exhaust	1.17	Operation	0	1.17
Ore Stockpile	4.00	No Control	0	4.00
Ore Stockpile Reclaim	0.35	Minimize Fall Distance	0	0.35
Screen, Convey, and Handle	4.50	Water Spray	50	2.25
Total	57.4			34.3

TABLE 2. ESTIMATED GASEOUS EMISSIONS FROM DIESEL EXHAUST

Gaseous Emissions	Ton/year
Nitrogen Oxides	16.4
Carbon Monoxide	3.6
Hydrocarbons	1.3
Sulfur Oxides	1.1

V. Existing Air Quality

The air quality classification for the area is “Better than National Standards” or unclassifiable attainment for the National Ambient Air Quality Standards for criteria pollutants. There are no non-attainment areas within a reasonable distance from the site. The current permit action will not affect the existing air quality of the area.

VI. Taking or Damaging Implication Analysis

As required by Section 2-10-101 MCA, the Department conducted a private property taking and damaging assessment and determined that there are no taking or damaging implications.

VII. Environmental Assessment

An environmental assessment was not required for this permit action because it is considered an administrative action.

Permit Analysis Prepared by: Pat Driscoll

Date: 7/8/03