# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

November 3, 2016

PERMIT TO INSTALL 31-02B

#### **ISSUED TO**

ON Minerals (Michigan) DBA Carmeuse Lime and Stone Inc.

#### **LOCATED AT**

1035 Calcite Road Rogers City, Michigan

#### IN THE COUNTY OF

Presque Isle

## STATE REGISTRATION NUMBER B4925

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

| DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:  September 29, 2016 |            |  |  |
|--|------------|--|--|
| November 3, 2016   | SIGNATURE: |  |  |
| DATE PERMIT VOIDED:  | SIGNATURE: |  |  |
| DATE PERMIT REVOKED:   | SIGNATURE: |  |  |

# **PERMIT TO INSTALL**

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# **Common Abbreviations / Acronyms**

|             | Common Acronyms   | Pollutant / Measurement Abbreviations |  |  |
|-------------|---|---------------------------------------|--|--|
| AQD         | Air Quality Division                                    | acfm Actual cubic feet per minute     |  |  |
| BACT        | Best Available Control Technology                       | BTU                                   | British Thermal Unit   |  |
| CAA         | Clean Air Act   | °C                                    | Degrees Celsius  |  |
| CAM         | Compliance Assurance Monitoring                         | co                                    | Carbon Monoxide  |  |
| CEM         | Continuous Emission Monitoring                          | CO <sub>2</sub> e                     | Carbon Dioxide Equivalent  |  |
| CFR         | Code of Federal Regulations                             | dscf                                  | Dry standard cubic foot  |  |
| СОМ         | Continuous Opacity Monitoring                           | dscm                                  | Dry standard cubic meter   |  |
| Department/ | Michigan Department of Environmental                    | °F                                    | Degrees Fahrenheit   |  |
| department  | Quality   | gr                                    | Grains   |  |
| EU          | Emission Unit   | HAP                                   | Hazardous Air Pollutant  |  |
| FG          | Flexible Group  | Hg                                    | Mercury  |  |
| GACS        | Gallons of Applied Coating Solids                       | hr                                    | Hour   |  |
| GC          | General Condition                                       | HP                                    | Horsepower   |  |
| GHGs        | Greenhouse Gases  | H <sub>2</sub> S                      | Hydrogen Sulfide   |  |
| HVLP        | High Volume Low Pressure*                               | kW                                    | Kilowatt   |  |
| ID          | Identification  | lb                                    | Pound  |  |
| IRSL        | Initial Risk Screening Level                            | m                                     | Meter  |  |
| ITSL        | Initial Threshold Screening Level                       | mg                                    | Milligram  |  |
| LAER        | Lowest Achievable Emission Rate                         | mm                                    | Millimeter   |  |
| MACT        | Maximum Achievable Control Technology                   | MM                                    | Million  |  |
| MAERS       | Michigan Air Emissions Reporting System                 | MW                                    | Megawatts  |  |
| MAP         | Malfunction Abatement Plan                              | NMOC                                  | Non-methane Organic Compounds                                    |  |
| MDEQ        | Michigan Department of Environmental Quality            | NO <sub>x</sub>                       | Oxides of Nitrogen   |  |
| MSDS        | Material Safety Data Sheet                              | ng<br>PM                              | Nanogram<br>Particulate Matter                                   |  |
| NA          | Not Applicable  |                                       | Particulate Matter equal to or less than 10                      |  |
| NAAQS       | National Ambient Air Quality Standards                  | PM10                                  | microns in diameter  |  |
| NESHAP      | National Emission Standard for Hazardous Air Pollutants | PM2.5                                 | Particulate Matter equal to or less than 2.5 microns in diameter |  |
| NSPS        | New Source Performance Standards                        | pph                                   | Pounds per hour  |  |
| NSR         | New Source Review                                       | ppm                                   | Parts per million  |  |
| PS          | Performance Specification                               | ppmv                                  | Parts per million by volume                                      |  |
| PSD         | Prevention of Significant Deterioration                 | ppmw                                  | Parts per million by weight                                      |  |
| PTE         | Permanent Total Enclosure                               | psia                                  | Pounds per square inch absolute                                  |  |
| PTI         | Permit to Install                                       | psig                                  | Pounds per square inch gauge                                     |  |
| RACT        | Reasonable Available Control Technology                 | scf                                   | Standard cubic feet  |  |
| ROP         | Renewable Operating Permit                              | sec                                   | Seconds  |  |
| SC          | Special Condition                                       | SO <sub>2</sub>                       | Sulfur Dioxide   |  |
| SCR         | Selective Catalytic Reduction                           | TAC                                   | Toxic Air Contaminant  |  |
| SNCR        | Selective Non-Catalytic Reduction                       | Temp                                  | Temperature  |  |
| SRN         | State Registration Number                               | THC                                   | Total Hydrocarbons   |  |
| TEQ         | Toxicity Equivalence Quotient                           | tpy                                   | Tons per year  |  |
| USEPA/EPA   | United States Environmental Protection Agency           | μg                                    | Microgram  |  |
| VE          | Visible Emissions                                       | μm<br>VOC                             | Micrometer or Micron Volatile Organic Compounds                  |  |
|             | plicators, the proscure measured at the gur             | yr                                    | Year   |  |

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

#### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

#### **SPECIAL CONDITIONS**

# **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Emission Unit ID | Emission Unit Description (Process Equipment & Control Devices)   | Flexible Group ID |
|------------------|---|-------------------|
| EU-Process       | A combination of process equipment (screens, crushers, feeders, conveyors, etc.) used to reduce larger limestone materials down to smaller sizes, classify and sort limestone materials into various product types, material handling and transporting of limestone to storage areas. Control methods include equipment enclosures or enclosed within a building, water sprays, drop chutes and/or pant legs for transfer points. | NA                |
| EU-TruckTraffic  | Truck traffic for delivery of limestone products to customers, truck traffic from quarry pit to processing area and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks. All commercial truck areas and unpaved road portions from the quarry pit to the process area.   | NA                |
| EU-Storage       | Open area stock piles of various limestone sizes and product types. Water spray of materials are used when necessary for limestone storage piles.   | NA                |

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

# The following conditions apply to: EU-Process

<u>DESCRIPTION</u>: A combination of process equipment (screens, crushers, feeders, conveyors, etc.) used to reduce larger limestone materials down to smaller sizes, classify and sort limestone materials into various product types, material handling and transporting of limestone to storage areas.

Flexible Group ID: NA

<u>POLLUTION CONTROL EQUIPMENT</u>: Control methods include equipment enclosures or enclosed within a building, water sprays, drop chutes and/or pant legs for transfer points.

#### I. EMISSION LIMITS

| Pollutant  | Limit              | Time Period/<br>Operating<br>Scenario | Equipment   | Testing /<br>Monitoring<br>Method | Underlying<br>Applicable<br>Requirements                     |
|--|--------------------|---------------------------------------|---|-----------------------------------|--|
| Visible fugitive emissions                               | 10 percent opacity | Test Protocol*                        | Each crusher, screening operation, belt conveyor, and storage bin of EU-Process that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008. | SC V.1                            | 40 CFR 60.672(b),<br>Table 3 to<br>Subpart OOO of<br>Part 60 |
| Visible fugitive emissions                               | 7 percent opacity  | Test Protocol*                        | Each crusher, screening operation, belt conveyor, and storage bin of EU-Process that commenced construction, modification, or reconstruction on or after April 22, 2008.                      | SC V.1                            | 40 CFR 60.672(b),<br>Table 3 to<br>Subpart OOO of<br>Part 60 |
| * Test protocol shall specify the averaging time period. |                    |                                       |   |                                   |  |

3. The permittee shall not operate any portion of EU-Process unless each portion of EU-Process meets the specific opacity limit listed in Appendix A of this permit. (R 336.1301, 40 CFR 52.21 (c) & (d))

#### **II. MATERIAL LIMITS**

- The permittee shall not process any asbestos tailing or asbestos containing waste materials in EU-Process pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M. (40 CFR Part 61 Subpart M)
- 2. The permittee shall not process more than 120,000 tons of limestone per day nor 12,000,000 tons of limestone per 12-month rolling time period as determined at the end of each calendar month through EU-Process. (40 CFR 52.21 (c) & (d))

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EU-Process unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. (R 336.1371, R 336.1901)
- 2. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and OOO, as they apply to EU-Process. **(40 CFR Part 60 Subparts A & OOO)**

#### IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate any portion of EU-Process unless the equipment's specified control device listed in Appendix A is installed, maintained and operated in a satisfactory manner. (R 336.1901, R 336.1910, 40 CFR 52.21 (c) & (d))
- 2. Within 45 days of issuance of this permit, the permittee shall label all equipment of EU-Process using the company ID Numbers in Appendix A, according to a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment. Within seven days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed. (R 336.1201)
- 3. The permittee shall install and maintain a belt scale on the transfer conveyor (P6A & P7A) portion of EU-Process which continuously shows the daily throughput rate for the conveyor. (40 CFR 52.21 (c) & (d))

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Within 60 days after achieving maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall evaluate visible emissions from the new and modified portions of EU-Process, at owner's expense, in accordance with federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subparts A and OOO. The permittee must have prior approval from the AQD for visible emission observation procedures. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 45 days following the last date of the evaluation. (R 336.1301, 40 CFR Part 60 Subparts A & OOO)

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (40 CFR 52.21 (c) & (d))
- 2. The permittee shall keep daily and monthly records of the amount of material processed through EU-Process. Further the permittee shall calculate on a monthly basis, the yearly throughput rate based upon the most recent 12-month rolling time period. The permittee shall keep records of the amount of material processed on file for a period of at least five years and make them available to the Department upon request. (40 CFR 52.21 (c) & (d))

#### VII. REPORTING

- 1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-Process. (R 336.1216(1), R 336.1201(7)(a))
- 2. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. (40 CFR 60.7)

#### VIII. STACK/VENT RESTRICTIONS

NA

#### IX. OTHER REQUIREMENTS

NA

# The following conditions apply to: EU-TruckTraffic

<u>DESCRIPTION</u>: Truck traffic for delivery of limestone products to customers, truck traffic from quarry pit to processing area and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks. All commercial truck areas and unpaved road portions from the quarry pit to the process area.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT: NA** 

#### I. EMISSION LIMITS

1. Visible emissions from all wheel loaders and all truck traffic, operated in conjunction with EU-TruckTraffic, shall not exceed five (5) percent opacity. Compliance shall be demonstrated using Test Method 9D as defined in Section 324.5525(j) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). (R 336.1301, 40 CFR 52.21(c) & (d))

#### II. MATERIAL LIMITS

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-TruckTraffic unless the nuisance minimization plan for fugitive dust for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. (R 336.1371, R 336.1372, Act 451 324.5524)

#### IV. DESIGN/EQUIPMENT PARAMETERS

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTIONS

NA

#### IX. OTHER REQUIREMENTS

NA

#### The following conditions apply to: EU-Storage

**<u>DESCRIPTION</u>**: Open area stock piles of various limestone sizes and product types.

Flexible Group ID: NA

<u>POLLUTION CONTROL EQUIPMENT</u>: Water spray of materials are used when necessary for limestone storage piles.

#### I. EMISSION LIMITS

1. Visible emissions from each of the material storage piles maintained under EU-Storage, shall not exceed five (5) percent opacity. Compliance shall be demonstrated using Test Method 9D as defined in Section 324.5525(j) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). (R 336.1301, 40 CFR 52.21(c) & (d))

#### **II. MATERIAL LIMITS**

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-Storage unless the nuisance minimization plan for fugitive dust for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. (R 336.1371, R 336.1372, Act 451 324.5524)

#### IV. DESIGN/EQUIPMENT PARAMETERS

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTIONS

NA

#### IX. OTHER REQUIREMENTS

NA

# **APPENDIX A**

| Equipment Description | ID Number    | Opacity Limit (Percent) | Control Device            |
|-----------------------|--------------|-------------------------|---------------------------|
|                       |              |                         |                           |
| Gyratory Crusher      | Primary      | No Visible Emissions    | <b>Building Enclosure</b> |
| Cone Crusher          | #1 HP800     | No Visible Emissions    | <b>Building Enclosure</b> |
| Cone Crusher          | #2 Symons    | No Visible Emissions    | Building Enclosure        |
| Cone Crusher          | #3 Symons    | No Visible Emissions    | Building Enclosure        |
| Roll Crusher          | #1 Roll      | No Visible Emissions    | <b>Building Enclosure</b> |
| Roll Crusher          | #2 Roll      | No Visible Emissions    | <b>Building Enclosure</b> |
| Roll Crusher          | #3 Roll      | No Visible Emissions    | Building Enclosure        |
|                       |              |                         |                           |
| 8x12 Screen           | #11N Grizzly | No Visible Emissions    | <b>Building Enclosure</b> |
| 8x12 Screen           | #11S Grizzly | No Visible Emissions    | <b>Building Enclosure</b> |
| 8x16 Screen           | 903          | No Visible Emissions    | Building Enclosure        |
| 5x10 Screen           | 904          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x10 Screen           | 605          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x10 Screen           | 606          | No Visible Emissions    | Building Enclosure        |
| 5x10 Screen           | 607          | No Visible Emissions    | Building Enclosure        |
| 8x14 Screen           | 608          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 609          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 501          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 502          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 503          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x12 Screen           | 504          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 505          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 506          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 507          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 508          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 509          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 510          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 511          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x12 Screen           | 512          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x12 Screen           | 401          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x12 Screen           | 402          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x12 Screen           | 403          | No Visible Emissions    | <b>Building Enclosure</b> |
| 5x12 Screen           | 404          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 405          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 406          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 407          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 408          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 409          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 410          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 411          | No Visible Emissions    | Building Enclosure        |
| 5x12 Screen           | 412          | No Visible Emissions    | Building Enclosure        |

| Equipment Description | ID Number | Opacity Limit (Percent) | Control Device     |
|-----------------------|-----------|-------------------------|--------------------|
| 5x12 Screen           | 301       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 302       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 303       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 304       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 305       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 306       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 307       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 308       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 309       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 310       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 311       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 312       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 201       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 202       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 203       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 204       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 205       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 206       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 207       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 208       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 209       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 210       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 211       | No Visible Emissions    | Building Enclosure |
| 5x12 Screen           | 212       | No Visible Emissions    | Building Enclosure |
| 8x16 Screen           | L301      | No Visible Emissions    | Building Enclosure |
| 8x16 Screen           | L302      | No Visible Emissions    | Building Enclosure |
| 8x16 Screen           | L303      | No Visible Emissions    | Building Enclosure |
| 8x16 Screen           | L304      | No Visible Emissions    | Building Enclosure |
| 8x12 Screen           | L201      | No Visible Emissions    | Building Enclosure |
| 8x12 Screen           | L202      | No Visible Emissions    | Building Enclosure |
| 8x12 Screen           | L203      | No Visible Emissions    | Building Enclosure |
| 8x12 Screen           | L204      | No Visible Emissions    | Building Enclosure |
| 8x24 Screen           | N101      | No Visible Emissions    | Spray Bars         |
| 8x24 Screen           | N102      | No Visible Emissions    | Spray Bars         |
| 8x24 Screen           | N103      | No Visible Emissions    | Spray Bars         |
|                       |           |                         |                    |
| 54" Conveyor          | A1        | No Visible Emissions    | Building Enclosure |
| 48" Conveyor          | A2        | No Visible Emissions    | Building Enclosure |
| 48"Conveyor           | A3        | No Visible Emissions    | Building Enclosure |
| 36" Conveyor          | A4        | No Visible Emissions    | Building Enclosure |
| 36" Conveyor          | A5        | 10                      | Residual moisture  |
| 36" Conveyor          | A6        | 10                      | Residual moisture  |
| 48" Conveyor          | B1        | No Visible Emissions    | Building Enclosure |
| 48" Conveyor          | B2        | No Visible Emissions    | Building Enclosure |

| Equipment Description | ID Number | Opacity Limit (Percent) | Control Device                       |
|-----------------------|-----------|-------------------------|--------------------------------------|
| 48" Conveyor          | В3        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | B4        | 10                      | Residual moisture                    |
| 36" Conveyor          | B5        | 10                      | Residual moisture                    |
| 30" Conveyor          | C1        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | C1A       | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | C2        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | C3        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | C4        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | C5        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | C6        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | C7        | 10                      | Residual moisture                    |
| 36" Conveyor          | C8        | 10                      | Residual moisture                    |
| 36" Conveyor          | CS1       | No Visible Emissions    | Building Enclosure / Water<br>Sprays |
| 36" Conveyor          | CS2       | No Visible Emissions    | Building Enclosure / Water<br>Sprays |
| 30" Conveyor          | CS7       | 10                      | Residual moisture                    |
| 30" Conveyor          | D1        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | D2        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | D3        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | D4        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | D5        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | D6        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | D7        | 10                      | Residual moisture                    |
| 36" Conveyor          | D8        | 10                      | Residual moisture                    |
| 48" Conveyor          | E1        | No Visible Emissions    | Building Enclosure                   |
| 48" Conveyor          | E2        | No Visible Emissions    | Building Enclosure                   |
| 48" Conveyor          | E3        | No Visible Emissions    | Building Enclosure                   |
| 48" Conveyor          | E4        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | F1        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | F2        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | F3        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | F4        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | G1        | No Visible Emissions    | Building Enclosure                   |
| 42" Conveyor          | G2        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | G3        | No Visible Emissions    | Building Enclosure                   |
| 36" Conveyor          | GT1       | 10                      | Residual moisture                    |
| 30" Conveyor          | H1        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | H2        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | H3        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | H4        | No Visible Emissions    | Building Enclosure                   |
| 30" Conveyor          | H5        | 10                      | Belt Cover                           |
| 30" Conveyor          | H6        | 10                      | Belt Cover                           |
| 30" Conveyor          | H7        | 10                      | Belt Cover                           |

| Equipment Description         | ID Number | Opacity Limit (Percent) | Control Device                                    |
|-------------------------------|-----------|-------------------------|---|
| 36" Conveyor                  | J2        | 10                      | Belt Cover  |
| 36" Conveyor                  | J3        | 10                      | Belt Cover  |
| 36" Conveyor                  | J4        | 10                      | Belt Cover  |
| 36" Conveyor                  | J5        | 10                      | Residual moisture                                 |
| 48" Conveyor                  | L2        | No Visible Emissions    | Building Enclosure                                |
| 48" Conveyor                  | L3        | No Visible Emissions    | Building Enclosure                                |
| 48" Conveyor                  | L4        | No Visible Emissions    | Building Enclosure                                |
| 72" Conveyor                  | L5        | No Visible Emissions    | Building Enclosure                                |
| 72" Conveyor                  | L6        | No Visible Emissions    | Building Enclosure                                |
| 72" Conveyor                  | L7        | No Visible Emissions    | Building Enclosure                                |
| 72" Conveyor                  | L8        | 10                      | Residual moisture                                 |
| 72" Conveyor                  | L9        | 10                      | Residual moisture                                 |
| 72" Conveyor                  | L10       | 10                      | Residual moisture                                 |
| 72" Conveyor                  | L11       | 10                      | Residual moisture                                 |
| 36" Conveyor                  | L13       | No Visible Emissions    | Building Enclosure                                |
| 60" Conveyor                  | N1        | No Visible Emissions    | Building Enclosure                                |
| 48" Conveyor                  | N2        | No Visible Emissions    | Building Enclosure                                |
| 48" Conveyor                  | N5        | 7                       | Belt Cover  |
| 54" Conveyor                  | N6        | 7                       | Belt Cover  |
| 54" Conveyor                  | N7        | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | N8        | No Visible Emissions    | Building Enclosure                                |
| 42" Conveyor                  | N9        | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | N10       | 7                       | Belt Cover  |
| 60" Conveyor                  | N11       | 7                       | Partial Building Enclosure /<br>Residual moisture |
| 42" Conveyor                  | N12       | No Visible Emissions    | Building Enclosure                                |
| 36" Conveyor (Radial Stacker) | N13       | 7                       | Residual moisture                                 |
| 48" Conveyor                  | NT1       | No Visible Emissions    | Building Enclosure                                |
| 48" Conveyor                  | NT2       | No Visible Emissions    | Belt Cover  |
| 54" Conveyor                  | P2        | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | P3        | 10                      | Residual moisture                                 |
| 54" Conveyor                  | P4        | 10                      | Residual moisture                                 |
| 54" Conveyor                  | P5        | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | P6        | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | P6A       | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | P7        | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | P7A       | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | PF3       | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | PF4       | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | PF5       | No Visible Emissions    | Building Enclosure                                |
| 54" Conveyor                  | PF6       | No Visible Emissions    | Building Enclosure                                |
| 36" Conveyor                  | RC1       | No Visible Emissions    | Building Enclosure                                |
| 36" Conveyor                  | RC2       | No Visible Emissions    | Building Enclosure                                |
| 42" Conveyor                  | RC3       | No Visible Emissions    | Building Enclosure                                |

| Equipment Description | ID Number | Opacity Limit (Percent) | Control Device            |
|-----------------------|-----------|-------------------------|---------------------------|
| 36" Conveyor          | RC4       | No Visible Emissions    | <b>Building Enclosure</b> |
| 36" Conveyor          | RC5       | No Visible Emissions    | <b>Building Enclosure</b> |
| 36" Conveyor          | RC6       | No Visible Emissions    | Building Enclosure        |
| 30" Conveyor          | RC7       | No Visible Emissions    | Building Enclosure        |
| 36" Conveyor          | RC7A      | No Visible Emissions    | Building Enclosure        |
| 30" Conveyor          | RC8       | No Visible Emissions    | Building Enclosure        |
| 36" Conveyor          | RC9       | No Visible Emissions    | Building Enclosure        |
| 36" Conveyor          | RC10      | No Visible Emissions    | Building Enclosure        |
| 36" Conveyor          | RC11      | No Visible Emissions    | Building Enclosure        |
| 48" Conveyor          | RC14      | 10                      | Residual moisture         |
| 48" Conveyor          | RC15      | 10                      | Residual moisture         |
| Sand Screw            | ND        | 7                       | Wet product               |

# APPENDIX B Nuisance Minimization Plan Fugitive Dust

### I. Site Roadways / Plant Yard

- A. The dust on the site roadways/plant yard shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits.
- B. All paved roadways/plant yards shall be swept as needed between applications of dust suppressants.
- C. Any material spillage on roads shall be cleaned up immediately.
- D. A record of all applications of dust suppressants and roadway and the plant yard sweepings shall be kept on file for the most recent five year period and be made available to the AQD upon request.

#### II. Plant

A. The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.

#### III. Storage Piles

- A. Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.
- B. Stockpiles shall be watered on an as needed basis in order to meet the opacity limit of five percent. Also, equipment to apply water or dust suppressant shall be available at the site, or on call for use at the site, within a given operating day. A record of all watering shall be kept on file and be made available to the AQD upon request.

#### IV. Truck Traffic

A. On-site commercial trucks: Vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within six inches of the top of any side board, side panel or tail gate, otherwise, the truck shall be tarped.

#### V. AQD/MDEQ Inspection

A. The provisions and procedures of this plan are subject to adjustment if following an inspection and written notification the AQD finds the fugitive dust requirements and/or permitted emission limits are not being met.