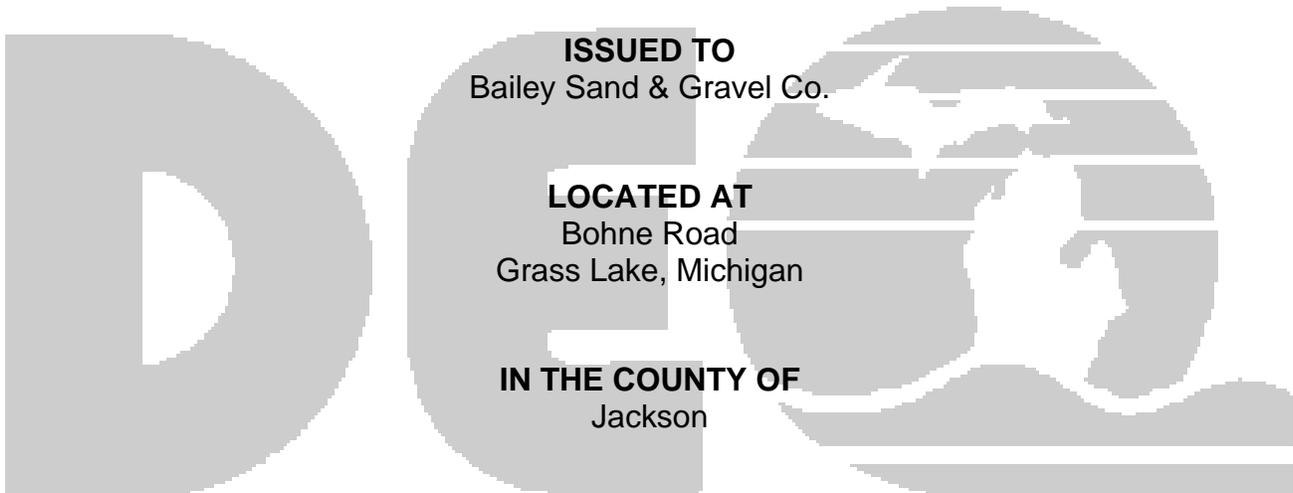


**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

October 30, 2009

**PERMIT TO INSTALL  
251-09**



**ISSUED TO**  
Bailey Sand & Gravel Co.

**LOCATED AT**  
Bohne Road  
Grass Lake, Michigan

**IN THE COUNTY OF**  
Jackson

**STATE REGISTRATION NUMBER  
N8341**

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:<br><b>October 30, 2009</b> |            |
| DATE PERMIT TO INSTALL APPROVED:<br><b>October 30, 2009</b>                         | SIGNATURE: |
| DATE PERMIT VOIDED:   | SIGNATURE: |
| DATE PERMIT REVOKED:  | SIGNATURE: |

**PERMIT TO INSTALL**

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**Common Abbreviations / Acronyms**

| <b>Common Acronyms</b> |   | <b>Pollutant/Measurement Abbreviations</b> |                                   |
|------------------------|---|--|-----------------------------------|
| AQD                    | Air Quality Division                                      | BTU  | British Thermal Unit              |
| BACT                   | Best Available Control Technology                         | °C   | Degrees Celsius                   |
| CAA                    | Clean Air Act   | CO   | Carbon Monoxide                   |
| CEM                    | Continuous Emission Monitoring                            | dscf                                       | Dry standard cubic foot           |
| CFR                    | Code of Federal Regulations                               | dscm                                       | Dry standard cubic meter          |
| COM                    | Continuous Opacity Monitoring                             | °F   | Degrees Fahrenheit                |
| EPA                    | Environmental Protection Agency                           | gr   | Grains                            |
| EU                     | Emission Unit   | Hg   | Mercury                           |
| FG                     | Flexible Group  | hr   | Hour                              |
| GACS                   | Gallon of Applied Coating Solids                          | H <sub>2</sub> S                           | Hydrogen Sulfide                  |
| GC                     | General Condition   | hp   | Horsepower                        |
| HAP                    | Hazardous Air Pollutant                                   | lb   | Pound                             |
| HVLP                   | High Volume Low Pressure *                                | m  | Meter                             |
| ID                     | Identification  | 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                                | ng   | Nanogram                          |
| MDEQ                   | Michigan Department of Environmental Quality (Department) | NO <sub>x</sub>                            | Oxides of Nitrogen                |
| MSDS                   | Material Safety Data Sheet                                | PM   | Particulate Matter                |
| NESHAP                 | National Emission Standard for Hazardous Air Pollutants   | PM10                                       | PM less than 10 microns diameter  |
| NSPS                   | New Source Performance Standards                          | PM2.5                                      | PM less than 2.5 microns diameter |
| NSR                    | New Source Review   | pph  | Pound per hour                    |
| PS                     | Performance Specification                                 | ppm  | Parts per million                 |
| PSD                    | Prevention of Significant Deterioration                   | ppmv                                       | Parts per million by volume       |
| PTE                    | Permanent Total Enclosure                                 | ppmw                                       | Parts per million by weight       |
| PTI                    | Permit to Install   | psia                                       | Pounds per square inch absolute   |
| RACT                   | Reasonably Available Control Technology                   | psig                                       | Pounds per square inch gauge      |
| ROP                    | Renewable Operating Permit                                | scf  | Standard cubic feet               |
| SC                     | Special Condition   | sec  | Seconds                           |
| SCR                    | Selective Catalytic Reduction                             | SO <sub>2</sub>                            | Sulfur Dioxide                    |
| SRN                    | State Registration Number                                 | THC  | Total Hydrocarbons                |
| TAC                    | Toxic Air Contaminant                                     | tpy  | Tons per year                     |
| TEQ                    | Toxicity Equivalence Quotient                             | µg   | Microgram                         |
| VE                     | Visible Emissions   | VOC  | Volatile Organic Compounds        |
|                        |   | yr   | Year                              |

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (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, 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.
9. 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<br>(Process Equipment & Control Devices)   | Installation Date /<br>Modification Date | Flexible Group<br>ID |
|--|--|--|----------------------|
| EUPROCESS  | A combination of process equipment (screens, crushers, feeders, conveyors, etc.) used to reduce larger materials down to smaller sizes, classify and sort materials into various product types, material handling and transporting of material to storage areas. Control methods include equipment enclosures or enclosed within a building, water sprays, drop chutes and/or pant legs for transfer points. |  | N/A                  |
| EUTRUCKTRAFFIC   | Truck traffic for delivery of material products to customers; truck traffic 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 to the process area.   |  | N/A                  |
| EUSTORAGE  | Open area stock piles of various material sizes and product types. Water spray of material products are used when necessary for material storage piles.  |  | N/A                  |
| 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: EUPROCESS**

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

**Flexible Group ID:** N/A

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

**I. EMISSION LIMITS**

1. Visible emissions from the drop point and transfer point portions of EUPROCESS shall not exceed 10 percent opacity. **(R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**II. MATERIAL LIMITS**

1. The permittee shall not process any asbestos tailing or asbestos containing waste materials in EUPROCESS 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 200,000 tons of material through EUPROCESS per 12-month rolling time period as determined at the end of each calendar month per site. **(R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUPROCESS 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 not operate any portion of EUPROCESS unless each portion of EUPROCESS meets the specific opacity limit listed in Appendix A of this permit. **(R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any portion of EUPROCESS unless the equipment's specified control device is installed, maintained and operated in a satisfactory manner as listed in Appendix A. **(R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall not process more than 150 tons of material per hour through the Eagle 1000 portable crusher (Device ID RC00) or the impact crusher (Device ID RC02) portions of EUPROCESS. **R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**V. TESTING/SAMPLING**

N/A

**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 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

2. The permittee shall keep daily and monthly records of the amount of material processed through EUPROCESS. 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 and make them available to the Department upon request. **(R 336.2803, R 336.2804, 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 EUPROCESS. **(R 336.1201(7)(a))**

## **VIII. STACK/VENT RESTRICTIONS**

N/A

## **IX. OTHER REQUIREMENTS**

1. Within 45 days of issuance of this permit, the permittee shall label all equipment 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)**
2. The permittee shall not relocate EU-PROCESS to any new geographical site in Michigan unless all of the following criteria are met:
  - a) EU-PROCESS shall not have any outstanding unresolved violations of any of the MDEQ Air Pollution Control rules, order, or permits; or federal air quality regulations.
  - b) The installation of EU-PROCESS at the geographical site shall be of a temporary nature lasting not more than 12 consecutive months.
  - c) The permittee shall provide a notice of intent to relocate along with a proposed site plan to the AQD district office not less than 10 days prior to the scheduled relocation identifying the proposed new geographical site and the probable duration at the new site. The permittee shall clearly identify all residential or commercial establishments and places of public assembly within 1,000 feet of the proposed site of EU-PROCESS on the proposed site plan.
  - d) The permittee shall not locate EU-PROCESS within 500 feet of a residential or commercial establishment or a place of public assembly unless prior written site approval is obtained from the AQD district office.
  - e) A copy of this permit and conditions shall be clearly posted in the operator's office or workstation.
  - f) The permittee shall not relocate EU-PROCESS to any geographical site for which there is a known controversy. **(Act 451 324.5505(5), R 336.1201, R 336.1205, R 336.1901)**

### **Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**The following conditions apply to: EUTRUCKTRAFFIC**

**DESCRIPTION:** Truck traffic for delivery of material products to customers; truck traffic 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 to the process area.

**Flexible Group ID:** N/A

**POLLUTION CONTROL EQUIPMENT:** As described in the Fugitive Dust Control Plan (Appendix B).

**I. EMISSION LIMITS**

1. Visible emissions from all wheel loaders and all truck traffic, operated in conjunction with EUTRUCKTRAFFIC, shall not exceed 5 percent opacity. **(R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

**II. MATERIAL LIMITS**

N/A

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUTRUCKTRAFFIC 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 336.1372, Act 451 324.5524)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

N/A

**V. TESTING/SAMPLING**

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

N/A

**VI. MONITORING/RECORDKEEPING**

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

N/A

**VII. REPORTING**

N/A

**VIII. STACK/VENT RESTRICTIONS**

N/A

**IX. OTHER REQUIREMENTS**

N/A

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**The following conditions apply to: EUSTORAGE**

**DESCRIPTION:** Open area stock piles of various material sizes and product types.

**Flexible Group ID:** N/A

**POLLUTION CONTROL EQUIPMENT:** Water spray of material products are used when necessary for material storage piles.

**I. EMISSION LIMITS**

1. Visible emissions from each of the material storage piles maintained under EUSTORAGE shall not exceed 5 percent opacity. **(R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

**II. MATERIAL LIMITS**

N/A

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUSTORAGE 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 336.1372, Act 451 324.5524)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

N/A

**V. TESTING/SAMPLING**

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

N/A

**VI. MONITORING/RECORDKEEPING**

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

N/A

**VII. REPORTING**

N/A

**VIII. STACK/VENT RESTRICTIONS**

N/A

**IX. OTHER REQUIREMENTS**

N/A

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).



## **APPENDIX B Fugitive Dust Control Plan**

### **I. Site Roadways / Plant Yard**

- A. The dust on the site roadways and the 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. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.
- B. All paved roadways and the plant yards shall be swept as needed between applications.
- C. Any material spillage on roads shall be cleaned up immediately.

### **II. Plant**

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 5 percent. 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/dust suppressant applications shall be kept on file and be made available to the AQD upon request.

### **IV. Truck Traffic**

On-site 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 6 inches of the top of any side board, side panel or tailgate. Otherwise, the truck shall be tarped.

### **V. AQD/MDEQ Inspection**

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