MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

April 30, 2018

PERMIT TO INSTALL 248-05D

ISSUED TOGreat Lakes Aggregates, LLC

LOCATED AT 5699 Ready Road South Rockwood, Michigan

IN THE COUNTY OF Monroe

TRIS PENINSULA

STATE REGISTRATION NUMBER N5241

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: March 15, 2018			
DATE PERMIT TO INSTALL APPROVED: April 30, 2018	SIGNATURE:		
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms			•	
AQD	Common Acronyms		Pollutant / Measurement Abbreviations	
	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 ₂ e	Carbon Dioxide Equivalent	
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot	
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter	
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit	
department EU	Quality Emission Unit	gr HAP	Grains Hazardous Air Pollutant	
FG	Flexible Group			
GACS	Gallons of Applied Coating Solids	Hg	Mercury	
GC	General Condition	hr	Hour	
GHGs	Greenhouse Gases	HP	Horsepower	
		H ₂ 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	NO _x	Oxides of Nitrogen	
	Quality	ng	Nanogram	
MSDS	Material Safety Data Sheet	PM	Particulate Matter	
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10	
NAAQS	National Ambient Air Quality Standards		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 ₂	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	μg	Microgram	
	Agency	μm	Micrometer or Micron	
VE	Visible Emissions	VOC yr	Volatile Organic Compounds Year	
For HVI P applicators, the pressure measured at the gun air can shall not exceed 10 psig				

^{*}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.
- 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 (Process Equipment & Control Devices)	Flexible Group ID	
EUSANDSTONE	A combination of process equipment (screens, crushers, feeders, conveyors, etc.) used to reduce larger silica sand (sandstone) materials down to smaller sizes, classify and sort silica sand (sandstone) 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.	NA	
EULIMESTONE	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 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.	NA	
EUROCKDRILLS	Rock drills used in preparation of blasting. Emissions generated during drilling are controlled by either wet suppression or mechanical collection.	NA	
EUBLASTING	Loosening of material from quarry walls and floor through the use of explosives.	NA	
EUTRUCKTRAFFIC	Truck traffic for delivery of material 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 traffic areas are paved roadways. A water truck is used daily for application of dust suppressants and water to both paved roadways and unpaved road portions from the quarry pit to the process area.	NA	
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.	NA	
EUOVERBURDEN	Operation associated with the removal of topsoil and subsoil above the quarry.	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: EUSANDSTONE

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

Flexible Group ID: NA

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

I. <u>EMISSION LIMITS</u>

- The permittee shall not operate any portion of EUSANDSTONE unless each portion of EUSANDSTONE meets the specific opacity limit listed in Appendix A of this permit. (R 336.1301, 40 CFR 52.21(c) & (d), 40 CFR 60.670)
- 2. Visible emissions from the drop point and transfer point portions of EUSANDSTONE shall not exceed 10 percent opacity. (R 336.1301, 40 CFR 52.21(c) & (d), 40 CFR 60.670)

II. MATERIAL LIMITS

- 1. The permittee shall not process any asbestos tailing or asbestos containing waste materials in EUSANDSTONE 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 715,000 tons of silica sand (sandstone) through EUSANDSTONE per 12-month rolling time period as determined at the end of each calendar month. The permittee may process limestone through EUSANDSTONE in accordance with the limits contained in EULIMESTONE. (40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EUSANDSTONE 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 336.1901)
- 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 EUSANDSTONE. (40 CFR Part 60 Subparts A & OOO)

IV. DESIGN/EQUIPMENT PARAMETERS

 The permittee shall not operate any portion of EUSANDSTONE unless the equipment's specified control device is installed, maintained and operated in a satisfactory manner as listed in Appendix A. (R 336.1910, 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 EUSANDSTONE, 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 EUSANDSTONE. 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. (40 CFR 52.21(c) & (d))
- 3. The permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in EUSANDSTONE wet suppression systems, in accordance with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and OOO. The permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if the permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The permittee shall keep a record of each inspection of the water spray nozzles, including the date of each inspection and any corrective action taken, on file at the facility and make them available to the Department upon request. (40 CFR Part 60 Subparts A & OOO, 40 CFR 60.674(b), 40 CFR 60.676(b))

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 EUSANDSTONE. (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

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)

The following conditions apply to: **EULIMESTONE**

<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 material to storage areas.

Flexible Group ID: NA

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

I. <u>EMISSION LIMITS</u>

- 1. The permittee shall not operate any portion of EULIMESTONE unless each portion of EULIMESTONE meets the specific opacity limit listed in Appendix A of this permit. (R 336.1301, 40 CFR 52.21(c) & (d), 40 CFR 60.670)
- 2. Visible emissions from the drop point and transfer point portions of EULIMESTONE shall not exceed 10 percent opacity. (R 336.1301, 40 CFR 52.21(c) & (d), 40 CFR 60.670)

II. MATERIAL LIMITS

- 1. The permittee shall not process any asbestos tailing or asbestos containing waste materials in EULIMESTONE 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 16,500 tons of limestone per day nor 3,000,000 tons of limestone through EULIMESTONE per 12-month rolling time period as determined at the end of each calendar month. The permittee may process sandstone through EULIMESTONE in accordance with the limits contained in EUSANDSTONE. (40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EULIMESTONE 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 336.1901)
- 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 EULIMESTONE. (40 CFR Part 60 Subparts A & OOO)

IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate any portion of EULIMESTONE unless the equipment's specified control device is installed, maintained and operated in a satisfactory manner as listed in Appendix A. (R 336.1910, 40 CFR 52.21(c) & (d))
- 2. The permittee shall install and maintain a belt scale on the transfer conveyor TC 024 portion of EULIMESTONE 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 any new EULIMESTONE equipment, 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 EULIMESTONE. 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. (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 EULIMESTONE. (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

 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)

The following conditions apply to: EUROCKDRILLS

DESCRIPTION: Rock drills used in preparation of blasting.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Wet suppression or mechanical collection

I. <u>EMISSION LIMITS</u>

1. Visible emissions from each individual rock drill in EUROCKDRILLS shall not exceed 5 percent opacity. (R 336.1301, 40 CFR 52.21(c) & (d))

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUROCKDRILLS for more than 2500 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1301, 40 CFR 52.21(c) & (d))

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUROCKDRILLS unless the wet suppression or mechanical collection control device is installed, maintained, and operated in a satisfactory manner. (R 336.1910, 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))

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

The following conditions apply to: EUBLASTING

DESCRIPTION: Loosening of material from quarry walls and floor through the use of explosives.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

I. <u>EMISSION LIMITS</u>

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not perform more than 1 blast per calendar day. Each blast shall not exceed a maximum depth of 100 feet nor a maximum area of 11,000 square feet. (40 CFR 52.21(c) & (d))
- 2. The permittee shall not operate EUBLASTING 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 336.1901)

IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

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))

1. The permittee shall keep, in a satisfactory manner, records of the date and time of the blast, the blast depth, and the area of the blast, for each blast performed, on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c) & (d))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

The following conditions apply to: EUTRUCKTRAFFIC

<u>DESCRIPTION</u>: Truck traffic for delivery of material 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 traffic areas are paved roadways. A water truck is used daily for application of dust suppressants and water to both paved roadways and unpaved road portions from the quarry pit to the process area.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Water and dust suppressants

I. <u>EMISSION LIMITS</u>

1. Visible emissions from all wheel loaders and all truck traffic, operated in conjunction with EUTRUCKTRAFFIC, 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 EUTRUCKTRAFFIC 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))

1. The permittee shall keep, in a satisfactory manner, monthly records of the amount of material shipped off site via EUTRUCKTRAFFIC. All records shall be kept on file at the facility and made available to the Department upon request. (40 CFR 52.21(c) & (d))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

The following conditions apply to: EUSTORAGE

<u>DESCRIPTION</u>: Open area stock piles of various material sizes and product types. Water spray of material products are used when necessary for material storage piles.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Water suppression

I. <u>EMISSION LIMITS</u>

1. Visible emissions from each of the material storage piles maintained under EUSTORAGE 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

1. The maximum amount of material stored under EUSTORAGE shall not exceed 1,000,000 tons at any given time. (40 CFR 52.21(c) & (d), Act 451 324.5524)

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSTORAGE 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

The following conditions apply to: EUOVERBURDEN

DESCRIPTION: Operation associated with the removal of topsoil and subsoil above the quarry.

Flexible Group ID:

POLLUTION CONTROL EQUIPMENT: Water and dust suppressants

I. EMISSION LIMITS

1. There shall be no visible emissions from EUOVERBURDEN. (R 336.1301, 40 CFR 52.21(c) & (d))

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUOVERBURDEN 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

APPENDIX A

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Gyratory Crusher (EULIMESTONE)	G001	15	Water Spray
Jaw Crusher (EULIMESTONE)	J001	15	Water Spray
Conveyor (EULIMESTONE)	TC028	10	Water Spray
Conveyor (EULIMESTONE)	TC027	10	Residual Moisture
Stacker (EULIMESTONE)	SC014	10	Residual Moisture
Feeder (EULIMESTONE)	F001	No Visible Emissions	Under Surge Pile
Feeder (EULIMESTONE)	F002	No Visible Emissions	Under Surge Pile
Feeder (EULIMESTONE)	F003	No Visible Emissions	Under Surge Pile
Conveyor (EULIMESTONE)	TC024	10	Residual Moisture
Conveyor (EULIMESTONE)	TC023	10	Water Spray
Screen (EULIMESTONE)	S002	No Visible Emissions	Enclosed Within Building
Feeder (EULIMESTONE)	F004	No Visible Emissions	Enclosed Within Building
Feeder (EULIMESTONE)	F005	No Visible Emissions	Enclosed Within Building
Conveyor (EULIMESTONE)	TC018	10	Residual Moisture
Stacker (EULIMESTONE)	SC012	10	Residual Moisture
Conveyor (EULIMESTONE)	TC022	10	Residual Moisture
Stacker (EULIMESTONE)	SC011	10	Residual Moisture
Conveyor (EULIMESTONE)	TC019	10	Residual Moisture
Stacker (EULIMESTONE)	SC008	10	Residual Moisture
Cone Crusher (EULIMESTONE)	C001	No Visible Emissions	Enclosed Within Building
Cone Crusher (EULIMESTONE)	C002	No Visible Emissions	Enclosed Within Building
Cone Crusher (EULIMESTONE)	C003	No Visible Emissions	Enclosed Within Building

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Conveyor (EULIMESTONE)	TC014	10	Residual Moisture
Conveyor (EULIMESTONE)	TC007	10	Residual Moisture
Conveyor (EULIMESTONE)	TC017	10	Residual Moisture
Conveyor (EULIMESTONE)	TC016	10	Residual Moisture
Conveyor (EULIMESTONE)	TC012	10	Residual Moisture
Conveyor (EULIMESTONE)	TC015	10	Residual Moisture
Conveyor (EULIMESTONE)	TC035	No Visible Emissions	Enclosed Within Building
Conveyor (EULIMESTONE)	TC036	No Visible Emissions	Enclosed Within Building
Conveyor (EULIMESTONE)	TC037	No Visible Emissions	Enclosed Within Building
Conveyor (EULIMESTONE)	TC038	No Visible Emissions	Enclosed Within Building
Conveyor (EULIMESTONE)	TC033	No Visible Emissions	Enclosed Within Building
Screen (EULIMESTONE)	S003	No Visible Emissions	Enclosed Within Building
Screen (EULIMESTONE)	S004	No Visible Emissions	Enclosed Within Building
Screen (EULIMESTONE)	S005	No Visible Emissions	Enclosed Within Building
Screen (EULIMESTONE)	S006	No Visible Emissions	Enclosed Within Building
Screen (EULIMESTONE)	S007	No Visible Emissions	Enclosed Within Building
Screen (EULIMESTONE)	S008	No Visible Emissions	Enclosed Within Building
Conveyor (EULIMESTONE)	TC006	10	Residual Moisture
Stacker (EULIMESTONE)	SC004	10	Residual Moisture
Conveyor (EULIMESTONE)	TC002	10	Residual Moisture
Stacker (EULIMESTONE)	SC002	10	Residual Moisture
Conveyor (EULIMESTONE)	TC039	10	Residual Moisture
Conveyor (EULIMESTONE)	TC004	10	Residual Moisture

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Conveyor (EULIMESTONE)	TC005	10	Residual Moisture
Conveyor (EULIMESTONE)	TC008	10	Residual Moisture
Conveyor (EULIMESTONE)	TC010	10	Residual Moisture
Conveyor (EULIMESTONE)	TC011	10	Residual Moisture
Stacker (EULIMESTONE)	SC006	10	Residual Moisture
Stacker (EULIMESTONE)	SC005	10	Residual Moisture
Conveyor (EULIMESTONE)	TC001	10	Residual Moisture
Stacker (EULIMESTONE)	SC001	10	Residual Moisture
Conveyor (EULIMESTONE)	TC003	10	Residual Moisture
Stacker (EULIMESTONE)	SC003	10	Residual Moisture
Screen (EULIMESTONE)	S009	10	Residual Moisture
Screen (EULIMESTONE)	S010	10	Residual Moisture
Twin Sand Screw (EULIMESTONE)s	SS001	10	Residual Moisture
Stacker (EULIMESTONE)	SC016	10	Residual Moisture
Hopper (EULIMESTONE)	RH002	10	Residual Moisture
Conveyor (EULIMESTONE)	TC029	10	Residual Moisture
Conveyor (EULIMESTONE)	TC030	10	Residual Moisture
Conveyor (EULIMESTONE)	TC031	10	Residual Moisture
Hopper (EULIMESTONE)	H-101	10	Water Spray
Jaw Crusher (EULIMESTONE)	CR-101	15	Water Spray
Conveyor (EULIMESTONE)	C-102	10	Residual Moisture
Conveyor (EULIMESTONE)	C-103	10	Residual Moisture
Conveyor (EULIMESTONE)	C-104	10	Residual Moisture

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Screen (EULIMESTONE)	S-101	10	Residual Moisture
Cone Crusher (EULIMESTONE)	CR-102	15	Water Spray
Stacker (EULIMESTONE)	SC009	10	Residual Moisture
Screen (EULIMESTONE)	S011	10	Residual Moisture
Conveyor (EULIMESTONE)	TC040	10	Residual Moisture
Conveyor (EULIMESTONE)	TC041	10	Residual Moisture
Conveyor (EULIMESTONE)	TC042	10	Residual Moisture
Conveyor (EULIMESTONE)	TC043	10	Residual Moisture
Conveyor (EULIMESTONE)	TC044	10	Residual Moisture
Conveyor (EULIMESTONE)	TC045	10	Residual Moisture
Feeder (EUSANDSTONE)	F-1	7	Residual Moisture
Feeder (EUSANDSTONE)	F-2	7	Residual Moisture
Jaw Crusher (EUSANDSTONE)	CR-1	12	Water Sprays
Cone Crusher (EUSANDSTONE)	CR-2	12	Water Sprays
Screen (EUSANDSTONE)	SC-1	7	Water Sprays
Screen (EUSANDSTONE)	SC-2	7	Water Sprays
Transfer Conveyor (EUSANDSTONE)	C-1	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-2	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-3	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-4	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-5	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-6	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-7	7	Residual Moisture

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Transfer Conveyor (EUSANDSTONE)	C-8	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-9	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-10	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-11	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-12	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-13	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-14	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-15	7	Residual Moisture
Transfer Conveyor (EUSANDSTONE)	C-16	7	Residual Moisture

APPENDIX B Nuisance Minimization Plan Fugitive Dust

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. The transfer point from the re-circulating belt to the feed belt shall be equipped with an enclosed chute.

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

- A. 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.
- B. To minimize track out of materials onto public roadways, the permittee shall employ one or more of the following methods for vehicles leaving the plant premises:
 - 1. An appropriately designed and maintained wheel wash and/or rumble strip section near the plant exit.
 - 2. Daily mechanical cleaning of plant exit by vacuum sweeping, wet sweeping, or flushing.

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.