MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

April 23, 2024

PERMIT TO INSTALL 44-24

ISSUED TO
Carmeuse Lime & Stone

LOCATED AT
22331 East Haul Road
Drummond Island, Michigan

IN THE COUNTY OF Chippewa

STATE REGISTRATION NUMBER B2362

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. 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 16, 2024				
April 23, 2024	SIGNATURE:			
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD Air Quality Division

BACT Best Available Control Technology

CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

COMS Continuous Opacity Monitoring System

Department/department/EGLE Michigan Department of Environment, Great Lakes, and Energy

EU Emission Unit FG Flexible Group

GACS Gallons of Applied Coating Solids

GC General Condition
GHGs Greenhouse Gases

HVLP High Volume Low Pressure*

ID Identification

IRSLInitial Risk Screening LevelITSLInitial Threshold Screening LevelLAERLowest Achievable Emission RateMACTMaximum Achievable Control TechnologyMAERSMichigan Air Emissions Reporting System

MAP Malfunction Abatement Plan MSDS Material Safety Data Sheet

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standard for Hazardous Air Pollutants

NSPS New Source Performance Standards

NSR New Source Review
PS Performance Specification

PSD Prevention of Significant Deterioration

PTE Permanent Total Enclosure

PTI Permit to Install

RACT Reasonable Available Control Technology

ROP Renewable Operating Permit

SC Special Condition

SCR Selective Catalytic Reduction SNCR Selective Non-Catalytic Reduction

SRN State Registration Number

TBD To Be Determined

TEQ Toxicity Equivalence Quotient

USEPA/EPA United States Environmental Protection Agency

VE Visible Emissions

^{*}For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm Actual cubic feet per minute

BTU British Thermal Unit °C Degrees Celsius CO Carbon Monoxide

CO2e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter Pegrees Fahrenheit

gr Grains

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

HP Horsepower Hydrogen Sulfide

kW Kilowatt

lb Pound

m Meter

mg Milligram

mm Millimeter

MM Million

MW Megawatts

NMOC Non-Methane Organic Compounds

NO_x Oxides of Nitrogen

ng Nanogram

PM Particulate Matter

PM10 Particulate Matter equal to or less than 10 microns in diameter PM2.5 Particulate Matter equal to or less than 2.5 microns in diameter

pph Pounds per hour ppm Parts per million

ppmv Parts per million by volume ppmw Parts per million by weight

psia Pounds per square inch absolute psig Pounds per square inch gauge

scf Standard cubic feet

 $\begin{array}{ccc} \text{sec} & \text{Seconds} \\ \text{SO}_2 & \text{Sulfur Dioxide} \end{array}$

TAC Toxic Air Contaminant

Temp Temperature

THC Total Hydrocarbons tpy Tons per year Microgram

µm Micrometer or Micron
VOC Volatile Organic Compounds

yr Year

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 Environment, Great Lakes, and Energy, 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 Rule 210 (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 Rule 219 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 Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. The permittee shall not operate this equipment in a manner that causes or permits the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, 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 Rule 301, 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 Rule 303 (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 Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

EMISSION UNIT 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 (Including Process Equipment & Control Device(s))	Flexible Group 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 water sprays.	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 areas and unpaved road portions from the quarry pit to the process area.	NA
EUSTORAGE	Open area stockpiles of various material sizes and product types. Water sprays of material products are used when necessary for material 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 336.1291.

EUPROCESS EMISSION UNIT CONDITIONS

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. Control methods include water sprays.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Water sprays are used as needed.

I. EMISSION LIMIT(S)

1. Visible emissions from the drop point and transfer point portions of EUPROCESS shall not exceed a six-minute average of 7 percent opacity. (R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d), 40 CFR 60.670)

II. MATERIAL LIMIT(S)

- 1. The permittee shall not process any asbestos tailing or waste materials containing asbestos 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 4,000,000 tons of material through EUPROCESS per 12-month rolling time period as determined at the end of each calendar month. (40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. 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), 40 CFR 60.670)
- 2. The permittee shall not operate EUPROCESS 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, Act 451 324.5524)
- 3. 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 EUPROCESS. (40 CFR Part 60 Subparts A & SUBPART OOO)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 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 acceptable to the AQD District Supervisor and as listed in Appendix A. (R 336.1910, 40 CFR 52.21(c) and (d))
- 2. The permittee shall install and maintain a belt scale on the transfer conveyor BC5120 portion of EUPROCESS 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. Upon request of the AQD District Supervisor the permittee shall evaluate visible emissions from EUPROCESS, as required by federal Standards of Performance for New Stationary Sources, at owner's expense, in accordance 40 CFR Part 60 Subparts A and OOO. Visible emission observation procedures must have prior approval by the AQD Technical Programs Unit and District Office. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 45 days following the last date of the test. (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, in a satisfactory manner acceptable to the AQD District Supervisor 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. (40 CFR 52.21(c) & (d))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

 The permittee shall maintain all equipment labels using the company ID Numbers in Appendix A, in a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment. (R 336.1201)

Footnotes:

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

EUTRUCKTRAFFIC EMISSION UNIT CONDITIONS

DESCRIPTION

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 areas and unpaved road portions from the quarry pit to the process area.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Water sprays or other dust suppressants on roadways are used when necessary.

I. EMISSION LIMIT(S)

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 LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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, Act 451 324.5524)

IV. DESIGN/EQUIPMENT PARAMETER(S)

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 RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

EUSTORAGE EMISSION UNIT CONDITIONS

DESCRIPTION

Open area stock piles of various material sizes and product types. Water sprays of material products are used when necessary for material storage piles.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Water sprays of material products are used when necessary for material storage piles.

I. EMISSION LIMIT(S)

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 LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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, Act 451 324.5524)

IV. DESIGN/EQUIPMENT PARAMETER(S)

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 RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

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IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

APPENDIX A

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Apron Feeder	AF5049	7	Residual Moisture
Primary Crusher	CC5050	12	Water Sprays
Conveyor	BC5020	7	Residual Moisture
Conveyor	SR5029	7	Residual Moisture
Vibrating Feeder	VF5001	7	Residual Moisture
Vibrating Feeder	VF5002	7	Residual Moisture
Vibrating Feeder	VF5003	7	Residual Moisture
Conveyor	BC5120	7	Residual Moisture
Conveyor	BC5121	7	Residual Moisture
Screen	SN5231	7	Residual Moisture
Screen	SN5232	7	Residual Moisture
Conveyor	BC5217	7	Residual Moisture
Screen	SN5310	7	Water Sprays/Residual Moisture
Conveyor	SR5329	7	Residual Moisture
Conveyor	SR5339	7	Residual Moisture
Screw	SW5545	7	Residual Moisture
Conveyor	BC5539	7	Residual Moisture
Conveyor	BC5201	7	Residual Moisture
Vibrating Feeder	VF5201	7	Residual Moisture
Secondary Crusher	CC5250	12	Residual Moisture
Conveyor	BC5210	7	Residual Moisture
Secondary Crusher	CC5251	12	Residual Moisture
Conveyor	BC5211	7	Residual Moisture
Conveyor	BC5212	7	Residual Moisture
Conveyor	BC5348	7	Residual Moisture
Conveyor	BC5349	7	Residual Moisture
Screen	SN5311	7	Water Sprays
Screen	SN5312	7	Water Sprays
Conveyor	BC5359	7	Residual Moisture
Conveyor	BC5368	7	Residual Moisture
Conveyor	BC5369	7	Residual Moisture
Conveyor	BC5378	7	Residual Moisture
Conveyor	BC5379	7	Residual Moisture
Conveyor	BC5388	7	Residual Moisture
Conveyor	BC5389	7	Residual Moisture
Conveyor	BC5398	7	Residual Moisture
Conveyor	BC5399	7	Residual Moisture

APPENDIX B Nuisance Minimization Plan for 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.
- D. Settling ponds shall be flooded and retain water to prevent dry material from being transported by wind.

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

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/EGLE 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.