

State Registration Number
N7362

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N7362-2020

**Graymont Western US Inc.
Graymont Western Lime, Inc.**

State Registration Number (SRN): N7362

Located at

181 West County Road 432, Gulliver, Schoolcraft County, Michigan 49840

Permit Number: MI-ROP-N7362-2020

Staff Report Date: August 17, 2020

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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AUGUST 17, 2020 - STAFF REPORT

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Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan’s Administrative Rules for Air Pollution Control promulgated under Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source’s applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	Graymont Western Lime, Inc. 181 West County Road 432 Gulliver, Michigan 49840
Source Registration Number (SRN):	N7362
North American Industry Classification System (NAICS) Code:	327410
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	202000045
Responsible Official:	Paul E. Stoll, Jr., Plant Manager 906-283-2350
AQD Contact:	Sydney Bruestle, Environmental Quality Analyst 906-236-3995
Date Application Received:	March 11, 2020
Date Application Was Administratively Complete:	March 11, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	August 17, 2020
Deadline for Public Comment:	September 16, 2020

Source Description

The Graymont Western Lime Inc. is located on the north shore of Lake Michigan, east of the city of Gulliver and adjacent to the Carmeuse Port Inland Limestone Plant. The facility receives limestone via conveyor belt from Carmeuse Port Inland Limestone Plant. The limestone is crushed, sized and washed to provide consistently sized raw material. The plant calcines the limestone into lime using a single rotary kiln (EU-KILN#1) with preheater and Niems style cooler. The kiln is fired with a mixture of coal and petroleum coke. The preheater/cooler acts as a sulfur dioxide absorption device. Several fabric filter baghouses are used at the plant for particulate matter control. The plant can produce 870 tons of lime per day, but no more than 292,000 tons per year. The facility operates a Yamnar 4TNV98 diesel fired auxiliary engine during times when the facility loses power and the main drive ceases operation. This ensures no damage to the kiln occurs during times of power-outages.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2019**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	196
Lead (Pb)	0
Nitrogen Oxides (NO _x)	256
Particulate Matter (PM)	12
Sulfur Dioxide (SO ₂)	19
Volatile Organic Compounds (VOCs)	0

The following table lists Hazardous Air Pollutant emissions as calculated in the 2019 MAERS report:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Hydrogen Chloride (HCl)	22.5
Total Hazardous Air Pollutants (HAPs)	22.5

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

See Parts C and D in the ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is in Schoolcraft County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter exceed 100 tons per year and the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

The stationary source was subject to review under the Prevention of Significant Deterioration regulations of 40 CFR 52.21, because at the time of New Source Review permitting the potential to emit of NOx, CO, SO2 and PM10 was greater than 100 tons per year.

During New Source Review a toxics review under Rules 224/225 was conducted for EU-KILN#1.

EU-COALPRECRUSHER, EU-COAL HANDLING, and EU-COAL SILO at the stationary source are subject to the Standards of Performance for Coal Preparation and Processing Plants promulgated in 40 CFR Part 60, Subparts A and Y.

EU-KILN#1 at the stationary source is subject to the Standards of Performance Lime Manufacturing Plants promulgated in 40 CFR Part 60, Subparts A and HH.

EU-KILN#1, at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants promulgated in 40 CFR Part 63, Subparts A and AAAAA.

EU-AUXENGINE at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ (RICE MACT). The ROP contains special conditions provided by Graymont Western Lime, Inc. in their application for applicable requirements from 40 CFR Part 63, Subparts A and ZZZZ. The AQD is not delegated the regulatory authority for this area source MACT.

The AQD's Rules 287 and 290 were revised on December 20, 2016. FGRULE287(2)(c) and FGRULE290 are flexible group tables created for emission units subject to these rules. Emission units installed before December 20, 2016, can comply with the requirements of Rule 287 and Rule 290 in effect at the time of installation or modification as identified in the tables. However, emission units installed or modified on or after December 20, 2016, must comply with the requirements of the current rules as outlined in the tables.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

FG-BAGHOUSES does not have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because the unit(s) does/do not have potential pre-control emissions over the major source thresholds.

The emission limitations or standards for PM at the stationary source with the underlying applicable requirements of 40 CFR Part 63, Subpart AAAAA—National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants from FG-MACT-AAAAA are exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR 64.2(b)(1)(i) because the 0.1 lb/ton of stone feed and 0.05 grams/dscm meet the CAM exemption for NSPS or MACT proposed after November 15, 1990.

The following Emission Units/Flexible Groups are subject to CAM:

Emission Unit/Flexible group ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/Flexible Group for CAM	PAM? *
EU-KILN#1	PM10/ 7.5 lbs/hr	40 CFR 52.21(j); R 336.1205 R 336.1331	Fabric filter dust collector	Continuous Opacity Monitoring System (COMS)	EU-KILN#1	No

Emission Unit/Flexible group ID	Pollutant/Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/Flexible Group for CAM	PAM? *
EU-KILN#1	PM10/ 0.1 lb/ton of stone feed	40 CFR 52.21(j); R 336.1205 R 336.1331	Fabric filter dust collector	Continuous Opacity Monitoring System (COMS)	EU-KILN#1	No
EU-KILN#1	PM10/ 29.2 tons/year	40 CFR 52.21(j); R 336.1205 R 336.1331	Fabric filter dust collector	Continuous Opacity Monitoring System (COMS)	EU-KILN#1	No

*Presumptively Acceptable Monitoring (PAM)

The facility operates a continuous opacity monitor (COMS) to verify compliance with the CAM subject PM10 emission limit. The CAM plan establishes an acceptable indicator range of 0-10% opacity. An excursion from the indicator range occurs when the 3-hour block average opacity value exceeds 8%.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-Wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-Wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-B7362-2015 are identified in Appendix 6 of the ROP.

PTI Number			
26-04			

Streamlined/Subsumed Requirements

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

Non-applicable Requirements

Part E of the ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the ROP Application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EU-COALPRECRUSHER	The coal pre-crusher is an attachment to the existing coal chute. The chute connects at the top	R 212(4)(h)	R 290(2)(a)(ii)(A)

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
	and bottom of the precrusher via a sealed flange.		

Draft ROP Terms/Conditions Not Agreed to by Applicant

This draft ROP does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by EGLE, AQD

The AQD proposes to approve this ROP. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft ROP and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Edward Lancaster, Marquette District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP Application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

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SEPTEMBER 22, 2020 - STAFF REPORT ADDENDUM

Purpose

A Staff Report dated August 17, 2020, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Paul E. Stoll Jr., Plant Manager 906-283-2350
AQD Contact:	Sydney Bruestle, Environmental Quality Analyst 906-236-3995

Summary of Pertinent Comments

The facility commented on FG-NSPS-Y stating the emission limit table currently lists that portions of EU-COAL HANDLING and EU-COAL SILO are subject to the monitoring/recordkeeping in SC VI.1, SC VI.2, and SC VI.3. This is incorrect. Sources constructed prior to April 28, 2008, are not subject to the portions of NSPS Subpart Y cited in these special conditions: 40 CFR 60.255(f)(1)(i), 40 CFR 60.255(f)(1)(ii), and 40 CFR 60.258(a)(1)-(3). Portions of EU-COAL HANDLING and EU-COAL SILO are only subject to a 20% opacity limit, which requires a one-time visible emission test pursuant to 40 CFR 60.255(a) as they were constructed prior to April 28, 2008.

Changes to the August 17, 2020 Draft ROP

AQD agrees with these comments, changes to the Monitoring/Testing Method section of the FG-NSPS-Y emission limit table were made to reference an added testing condition in Section V (V.3) to correctly outline the requirements for the equipment installed prior to April 28, 2008.