DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N736233978

FACILITY: GRAYMONT WESTERN LIME INC		**SRN / ID:** N7362
LOCATION: 181 W COUNTY ROAD 432, GULLIVER		**DISTRICT:** Upper Peninsula
CITY: GULLIVER		**COUNTY:** SCHOOLCRAFT
CONTACT: Ross Olson , HSE Specialist		**ACTIVITY DATE:** 03/30/2016
STAFF: Ed Lancaster	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled, compliance inspection.		
RESOLVED COMPLAINTS:		

The Graymont Western Lime Inc. facility began operation in May 2007. The plant is located at 181 West County Road 432, on the north shore of Lake Michigan, east of the city of Gulliver and adjacent to the Carmeuse Port Inland Limestone Plant, from which it receives limestone via conveyor belt. The limestone is crushed, sized and washed to provide a 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 can be 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 has the ability to produce 870 tons of lime per day, but no more than 292,000 tons per year.

I arrived at the facility and briefly met with Mr. PJ Stoll, Plant Manager, a short time later we were joined by Mr. Ross Olson and Mr. Steve White, Maintenance Supervisor. Mr. Olson, Mr. White and I then went to a conference room and began the inspection by reviewing the company's records for ROP No. MI-ROP-N7362-2015.

EU KILN#1:

I. EMISSION LIMITS:

A review of the company's electronic records and March 14, 2016, MAERS submittal showed the facility was in compliance with all of their emission limits, Special Condition (SC) Nos. I.1-10.

PM10 emissions in pounds per hour, pounds per ton of stone feed and tons per 12-month rolling time frame were 2.76 pounds, 0.06 pounds, and 11.9 tons, respectively.

NOx emissions in pounds per hour and tons per 12-month rolling time frame were 41.9 pounds and 180.2 tons.

SO2 emissions in pounds per hour and tons per 12-month rolling time frame were 4.83 pounds and 20.8 tons.

CO emissions in pounds per hour and tons per 12-month rolling time frame were 32.8 pounds and 140.8 tons.

No visible emissions were observed while I was at the facility.

II. MATERIAL LIMITS:

The company has no material limits for EU KILN#1.

III. PROCESS/OPERATIONAL RESTRICTIONS:

In 2015 the company reported processing 395,656 tons of limestone. SC III.1

In 2013 the company welded close the by-pass door, so all emissions pass through the baghouse. SC III.2

The company's OM&M and SSM Plans were last updated in 2013. SC III.3

According to Mr. White, when starting the kiln, propane is used to bring the kiln temperature up to approximately 250 degrees Fahrenheit. Fuel oil is used to bring the temperature up to 900 degrees, and then the kiln is fed continuously on coal. The company has not used pet coke. SC III.4

The gentleman stated coal is delivered daily by truck from Escanaba. They receive three to four double trailer trucks each day. Mr. Olson provided for data sheets (see file) titled: "SO2 Emissions - Custom Dates - Port Inland" for coal sulfur content, between March 1, 2015 and February 29, 2016. For all months the coal sulfur content was well under the limit of 2.5% by weight. SC III.5

IV. DESIGN/EQUIPMENT PARAMETERS:

The company has installed a NOx and CO CEMS. On Thursday, March 24, 2016, Mr. Olson called me to report the CO CEMS went down and it had to be shipped to the manufacturer for repairs. The unit was returned to service the afternoon of March 29th. SC IV.1

As mentioned above the baghouse can no longer be by-passed. Mr. Olson provided me with the afternoon shifts Kiln DECR Sheet for 7 March 2016, which tracks the operation of the NOx, CO, Opacity and Flow Monitors as well as the differential pressure readings across the baghouse. SC IV.2

As mentioned above and stated by Mr. White, the kiln has to be pre-heated in phases, to prevent damage to the refractory and kiln. SC IV.3

V. TESTING/SAMPLING:

Mr. Olson stated PM and PM10 testing as required by SC V.1, is scheduled to occur in 2017.

VI. MONITORING/RECORDKEEPING:

The baghouse COMS has been installed and is operating properly. The company watches for trends in the opacity to determine when maintenance/repairs need to be scheduled. SC VI.1

The last annual audit of the COMS occurred on May 29, 2015. SC VI.2

Mr. Olson provided me with 12 months of NOx and CO emissions recorded by their respective CEMS. SC VI.3 and 5

The company has been prompt in submitting their required quarterly Data Assessment Report. SC VI.4

A weigh conveyor has been installed by the company to track the daily amount of fuel consumed in the kiln. SC VI.6

The company keeps written/electronic records of the information required in SC VI.7.a-g, most of which has been mentioned above.

VII. REPORTING:

The company has been prompt in submitting the required quarterly, semi-annual and annual reports. The MAERS was received on March 14, 2016, and passed the audit. SC VII.1-4

VIII. STACK/VENT RESTRICTIONS:

The stack dimensions were not confirmed during this inspection. SC VIII.1

IX. OTHER REQUIREMENTS:

At the time of the inspection the company was in compliance with the provisions of the federal National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants as specified in 40 CFR Part 63, Subparts A and AAAAA, and the Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and HH, as they apply to EU-KILN#1. SC IX.1 and 2

EU-HAULING and EU-STONE HANDLING:

I. EMISSION LIMITS:

During the inspection I did not observe any visible emissions from the truck traffic nor the material storage piles at the facility. SC I.1

III. PROCESS/OPERATIONAL RESTRICTIONS:

The company's appears to be implementing their program for continuous fugitive emissions control per SC III.1

FG-BAGHOUSES:

I. EMISSION LIMITS:

Based on the company's 2015 MAERS, it appears to be in compliance with the PM10 pound per hour emissions limits for the baghouses. I did not observe visible emissions from any of the baghouses. SC I.1-21

VI. MONITORING/RECORDKEEPING:

Mr. Olson provided me with a copy of the Weekly Dust Collectors Inspection Log sheet signed and dated by the inspector and their immediate supervisor on December 29, 2015. SC VI.1

FG-FACILITY:

I. EMISSION LIMITS:

As mentioned above I did not observe any visible emissions while at the facility. SC I.1-2

III. PROCESS/OPERATIONAL RESTRICTIONS:

The facility has approved SSM and OM&M plans on file. SC III.1 and 2

In 2015 the company processed 395,656 tons of limestone feed, well below their 584,000 ton limit. SC III.3

VI. MONITORING/RECORDKEEPING:

The company is diligent in monitoring for visible emissions at their facility. SC VI.1

As witnessed above the company the company keeps records of the monthly amount of limestone processed and the 12-month rolling average. SC VI.2

FG-NSPS-Y: (Coal Preparation and Processing Plants > 200 tons of coal per day)

I. EMISSION LIMITS:

As mentioned above I did not observe any visible emissions while at the facility. SC I.1

V. TESTING/SAMPLING:

The company conducted a Method 9 performance test on the coal pre-crusher in December 2015. SC V.1

Mr. Olson stated the company was in the process of totally enclosing the coal pre-crusher, even though the unit is sealed.

VI. MONITORING/RECORDKEEPING:

The unit is sealed therefore there are no visible emissions associated with this equipment. SC VI.1-3

FG-RICEMACT:

III. PROCESS/OPERATIONAL RESTRICTIONS:

The company has opted for the work practice standards required by 40 CFR Part 63, Subpart ZZZZ. The oil was last changed on June 18, 2015. SC III.1

Mr. White reported the unit has been in place for 9 years and only has 2,037 hours of operation time.

VI. MONITORING/RECORDKEEPING:

Records for the engine were provided during the inspection. SC VI.1

VII. REPORTING:

The company has had no deviations to report for this unit. SC VII.4

FG-MACT-AAAAA: (New Lime Manufacturing Plant (LMP))

I. EMISSION LIMITS:

A review of the company's electronic records and March 14, 2016, MAERS submittal showed the facility was in compliance with all of their emission limits, Special Condition (SC) Nos. I.1-5.

PM emissions in pounds per ton of stone feed were 0.06 pounds.

No visible emissions were observed while I was at the facility.

III. PROCESS/OPERATIONAL RESTRICTIONS:

In lieu of using a bag leak detection system, the company uses a COMS and monitors the differential pressure across the baghouse to stay in compliance with the PM limits. SC III.2 and 6

V. TESTING/SAMPLING:

Mr. Olson stated PM emission testing as required by SC V.1, is scheduled to occur in 2017.

VI. MONITORING/RECORDKEEPING:

Records for the LMP were provided during the inspection. SC VI.-9

VII. REPORTING:

The company has had no deviations to report for this unit. SC VII.4

At the time of the inspection the company appeared to be in compliance.

The company's OM&M and SSM Plans were last updated in 2013. SC III.4 and 5

NAME Ed Lancaster DATE 6/14/16 SUPERVISOR Dan W. Mahi