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

B493150537

FACILITY: CARMEUSE LIME & STONE - PORT INLAND		**SRN / ID:** B4931
LOCATION: 15W COUNTY ROAD 432, GULLIVER		**DISTRICT:** Upper Peninsula
CITY: GULLIVER		**COUNTY:** SCHOOLCRAFT
CONTACT: Christopher Martin , Regional Environmental Manager		**ACTIVITY DATE:** 08/21/2019
STAFF: Joe Scanlan	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced inspection to determine compliance with PTI# 612-91D and PTI# 782-91A		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

Carmeuse is a producer of high calcium and dolomitic lime, chemical grade limestone and crushed limestone aggregate products used around the world in steel manufacturing, the energy sector, environmental services and construction. Carmeuse operates 28 production facilities, with headquarters in Pittsburgh, Pennsylvania, and Louvain La Neuve, Belgium.

Carmeuse Port Inland Operations is located near the community of Gulliver in Michigan's Upper Peninsula, on the northern shore of Lake Michigan. This facility consists of two open pit limestone quarries, drilling and blasting, crushing/conveying aggregate, and rail transport of aggregate from the quarry to the dock, and ship loading at the dock.

Carmeuse Port Inland produces:

- Chemical grade limestone--a high-purity limestone mined and sized for steel making, flue gas treatment and cement manufacturing;
- High calcium lime;
- Agricultural limestone; and
- Crushed limestone aggregate

The Port Inland dock and yard was originally constructed by Inland Steel in 1929; much of the aggregate transport, storage, and ship loading is of original design and function. The quarry is located 8 miles north of the Hi-Cal processing plant and ship loading dock. The quarry, processing plant and dock all operate seasonally and do not operate during the winter months.

Coarse stone is transported from the quarry to the processing plant by 60-ton capacity, side-unloading rail cars. The coarse stone is then transferred to the large hopper which feeds the two primary crushers. After crushing, stone is conveyed to the surge pile and, if necessary, conveyed to the secondary and/or tertiary crushers for further processing. The mill can process 20,000 tons of stone on an average day. Sorted by size, processed stone is then conveyed to numerous stockpiles that rest atop gravity-fed conveyors which supply the product to the ship loading dock. The dock can accommodate a single 600' vessel; crushed limestone is almost exclusively transported via Great Lakes freighters.

Carmeuse Port Inland has two air permits with the State of Michigan. PTI# 612-91D regulates the high calcium (Hi-Cal) quarry and plant; PTI# 782-91A regulates the dolomite quarry and plant. Both quarries and plants are subject to NSPS Subpart OOO.

PTI# 612-91D regulates the following Emission Units (EU):

- EUHICAL -- fugitive dust emissions from the High Calcium Plant crushers, screens, feeders and conveyors;
- EUROCKDRILLS -- fugitive dust emissions from rock drills;
- EUTRUCKTRAFFIC -- fugitive dust emissions from truck traffic in the High Calcium Quarry and haul roads; and
- EUSTORAGE -- fugitive dust emissions from storage piles and ship loading facility.

PTI# 782-91A is an older permit and does not list conditions by specific emission units. It regulates the following activities:

- Fugitive emissions from the Dolomite Limestone Processing Plant;
- Fugitive emissions from the rock drills Dolomite Quarry when drilling, crushing, conveying, screening;
- Fugitive emissions from truck traffic on all haul roads; and
- Fugitive emissions from Dolomite storage piles and ship loading facility.

INSPECTION

I arrived at the site late morning on Wednesday, August 21. Wearing appropriate PPE, I entered the main office and made contact with Production Manager Mr. Scott Whitman. Mr. Whitman explained that Wednesdays are the one day of the week the quarry and yard are not in operation and are down for regular maintenance. The facility would be down for about 12 hours on this particular day. He then guided me on a walking tour of the rail unloading area, stone processing area and crusher/screening operations, storage piles and ship loading dock. After becoming familiar with these areas, Mr. Whitman proceeded to drive us to quarry in a Carmeuse vehicle.

Dolomite has not been quarried or processed for several years at Port Inland. The Dolomite processing plant has been dismantled and is no longer on site. It was mentioned to Mr. Whitman that the company may request to void PTI# 782-91A since there is no plan to quarry or process dolomite in the near of long-term future. Because of this, the rest of this activity report will focus on PTI# 612-91D.

EUHICAL

EUHICAL has emission limits for PM and uses water sprays and/or a baghouse as control devices. The baghouse contains 244 bags. 110 of the bags were changed in July; all 244 will be replaced during winter downtime. Crushers, feeders, screens and conveyors all have opacity emission limits, ranging from 7% to 15%, however because the processing plant was down these emissions could not be evaluated. Fugitive dust was minimal to non-existent in the processing area--plant was not operation at the time of inspection.

For 2018 the company reported 7.79 tons of total PM-10 emissions and is in compliance with SC No. I for EUHICAL. The company does not quarry or process any material that may contain asbestos and is in compliance with SC No. II.1. The facility has not processed more than 15,000,000 tons of stone in a 12-month rolling time period. Weighed using the belt scale required in SC No. IV.2, the company reported a primary crusher throughput of 4,781,053 tons of stone total for 2018. EUHICAL operated a total of 5,304 hours in 2018. This is within the limit of 6100 hours in SC No. III.4.

EUROCKDRILLS

In 2018 the company reported a total of 2,210 hours of operation. This is below the limit of 19,000 total hours per 12-month rolling time period in SC No. III.2.

EUTRUCKTRAFFIC

Fugitive dust was minimal to non-existent on haul roads and unpaved areas. The company uses water trucks to keep haul roads and unpaved areas wet.

EUSTORAGE

Fugitive dust was minimal to non-existent in the storage piles and dock areas. Dust control is achieved by spraying water onto the materials when necessary.

SUMMARY

The facility is adequately following the Fugitive Dust Control Plan in Appendix B of PTI# 612-91D. The

rockdrills and processing plant were not in operation at the time of inspection so fugitive emissions from these sources could not be evaluated, however there have been no complaints regarding fugitive dust from this facility. Crushed stone storage areas and the ship loading dock also had no issues with fugitive dust emissions.

Carmeuse Port Inland appears to be in compliance with PTI# 612-91D, and at the company's discretion may request to void PTI# 782-91A due to a cease in quarrying and processing dolomitic limestone.

NAME J. Jackson DATE 9/30/2019 SUPERVISOR EJL