

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

A088464913

<b>FACILITY:</b> Billerud Escanaba LLC	<b>SRN / ID:</b> A0884
<b>LOCATION:</b> 7100 COUNTY 426 M.5 ROAD, ESCANABA	<b>DISTRICT:</b> Marquette
<b>CITY:</b> ESCANABA	<b>COUNTY:</b> DELTA
<b>CONTACT:</b> Frank Sliva (Omya Inc.) , PCC Plant Manager (6/2019)	<b>ACTIVITY DATE:</b> 09/16/2022
<b>STAFF:</b> Michael Conklin	<b>COMPLIANCE STATUS:</b> Compliance
<b>SUBJECT:</b> Targeted inspection for FY 22 on Section 2 - Omya, Incorporated.	<b>SOURCE CLASS:</b> MAJOR
<b>RESOLVED COMPLAINTS:</b>	

**Facility: Omya, Incorporated (A0884)**

**Location: 7100 County Rd 426, M.5 Rd. Escanaba, MI 49829**

**Contact: Frank Sliva, Plant Manager, 906-553-6704**

### Regulatory Authority

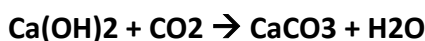
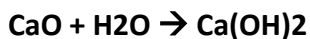
*Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.*

### Facility Description

Omya, Incorporated (Omya) produces and sells precipitated calcium carbonate (PCC). The PCC provides brightness, bulk, porosity, and smoothness to papers. Omya operates process equipment at Billerud Escanaba (Billerud) to produce PCC as part of the paper making process for Billerud. Equipment at the plant includes a carbonator system and lime silos. The process uses exhaust gases from the Lime Kiln as a CO<sub>2</sub> source for PCC production.

### Process Description

Water is added to lime to form calcium hydroxide (hydrated lime or slake). The addition of carbon dioxide and slaked lime produces calcium carbonate and water. Since the calcium carbonate is insoluble in water, it precipitates out.



## **Compliance History**

There have been no violations at the facility since the last inspection that occurred in 2019.

## **Regulatory Analysis**

Omya is identified as a second section of Billerud and is subject to MI-ROP-B7192-2020, Section 2 – Omya, Incorporated.

## **Inspection**

An on-site inspection was performed on 09/16/2022 to determine Omya's compliance with MI-ROP-A0884-2021a. The contact for the facility is Frank Sliva, Plant Manager. The carbonator system and lime silos were the emission units inspected at the source. At the time of the inspection, the plant was down for maintenance.

## **EUCARBONATORS**

Three carbonators, two of which may be used at a time for PCC production. Carbon dioxide will be routed to the carbonators from the Lime Kiln or from liquid CO<sub>2</sub>. Non-particulate emissions are from the Lime Kiln gas and are not a product of PCC production.

Gas from the lime kiln is pre-treated with a packed water spray scrubber/gas cooler which removes more particulate than added by the carbonation process. The exhaust from EUCARBONATORS is treated with a de-mister before reaching the PCC stack.

## ***Emission Limits***

The carbonator system contains PM, PM<sub>10</sub>, and PM<sub>2.5</sub> limits. Compliance is demonstrated through performing weekly non-certified visible emission checks as an indicator of proper operation of the wet scrubber and demisters.

## ***Design/Equipment Parameters***

During the inspection, the wet scrubber was observed installed as part of the carbonator system. The carbonator system was not in operation at the time of the inspection. The demisters were also observed as part of the carbonator system and are located directly above the carbonators before exhaust is routed out to the main stack.

***Monitoring/Recordkeeping***

The facility performs weekly non-certified visible opacity observations on the main stack to check for proper operation of the wet scrubber and demisters. Records are kept of the date, time, name, and visible emissions status.

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**EULIME**

A Lime silo is used in the precipitated calcium carbonate process to store lime prior to use. A baghouse at the top of the lime silo is used to control particulates.

***Emission Limits***

The lime silo contains PM, PM10, and PM2.5 limits. Compliance is demonstrated through performing weekly non-certified visible emission checks as an indicator of proper operation on the fabric filter baghouse.

***Process/Operational Restrictions***

Emissions from the lime silo is routed to a baghouse. The lime silo is not operated for more than 12-hours per day.

***Monitoring/Recordkeeping***

The facility performs weekly non-certified visible opacity observations on the lime silo baghouses to check for proper operation. Records are kept of the date, time, name, and visible emissions status.

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**Compliance**

Based on the inspection performed, Omya appears to be in compliance with MI-ROP-A0884-2021a and all other applicable state and federal air quality regulations.

NAME *Michael Kaplan*

DATE 9/30/2022

SUPERVISOR *Michael Kaplan*