

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N635431527

FACILITY: Superior Materials Holdings, LLC Plant 23		SRN / ID: N6354
LOCATION: 261 LAKE NEPESSING RD, LAPEER		DISTRICT: Lansing
CITY: LAPEER		COUNTY: LAPEER
CONTACT: Aaron Theut , Plant Manager		ACTIVITY DATE: 07/21/2015
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Unannounced, self-initiated inspection of facility which was last inspected in 2009.		
RESOLVED COMPLAINTS:		

On 7/21/2015, the Department of Environmental Quality (DEQ0, Air Quality Division (AQD)), conducted an unannounced, self-initiated inspection of the Superior Materials Holdings, LLC's Plant 23; a concrete batch plant, located in the City of Lapeer. This facility had last been inspected by AQD in 2009.

Environmental contact:

Brady Glomski, Area Manager: btglomski@superiormaterials.net

Aaron Theut, Plant Manager; 810-667-4600; altheut@superiormaterials.net

Facility description:

This facility is a concrete batch plant, equipped with baghouses, also known as fabric filters, for dust control purposes.

Emission units:

Emission unit description	Permit to Install and/or rule	Compliance status
Aggregate stockpiles	416-97A	Compliance
6 drive-over hoppers	416-97A	Compliance
4 aggregate bins (enclosed)	416-97A	Compliance
Cement silo with baghouse	416-97A	Compliance
Cement scale with baghouse	416-97A	Compliance
Flyash silo with baghouse	416-97A	Compliance
Truck loadout area, with 2 drop chutes, and voluntarily installed dust collector	416-97A; Rules 285(f) and/or 289 (d)(ii)	Compliance
Plant yard and roadways	416-97A	Compliance

Regulatory overview:

This facility has an existing air use permit for the concrete batch plant, Permit to Install No. 416-97A. They are classified as a minor source for particulate matter, not having a Potential to Emit (PTE) of 100 tons per year for particulate matter smaller than 10 microns (PM-10), or particulate matter smaller than 2.5 microns (PM 2.5). The facility is not known to be a source of any Hazardous Air Pollutants (HAPs). A facility would be considered a major source for HAPs if it had either PTE of 10 TPY of a single HAP, or 25 TPY of all HAPs combined.

Fee status:

This facility is not considered fee-subject, for the following reasons. Because it is not a major source for criteria pollutants, it is not classified as Category I. Additionally, because it is not a major source for Hazardous Air Pollutants (HAPs), and is not subject to federal New Source Performance Standards, it is not classified as Category II. Finally, because it is not subject to federal Maximum Achievable Control Technology standards, it is not classified as Category III. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Location:

The facility is located on the outskirts of the City of Lapeer. To the immediate south and east are fields, and then an industrial park. The nearest residences appear to be about 700 feet to the north. To the west are commercial businesses.

Recent history:

Superior Materials purchased Kurtz Gravel around 2007, according to the 6/4/2009 inspection report by AQD's Kenneth Terry. AQD had tried to conduct an unannounced inspection on more than one occasion, during 2012, and had arrived at the entrance to the plant to find the gates locked shut, and the site deserted. A phone call to the company at that time indicated that it was uncertain when the plant might be operating.

Arrival:

I arrived at 1:02 PM. Weather conditions were mostly sunny, 77 degrees F, and moderately humid, with winds out of the northwest at 10 miles per hour. The plant yard was paved with concrete, and some puddles of water were visible. There were no visible emissions from the concrete batch plant.

I met with Aaron Theut, Plant Manager. He indicated that the plant began operating again, a couple years ago. I did not remember to provide a copy of the DEQ brochure *Environmental Inspections: Rights and Responsibilities*, per AQD procedure, at the time of the inspection. I realized this, during the writing of this activity report, and therefore sent an e-mail to Mr. Theut, with a link to the online brochure.

Inspection:

PTI No. 416-97A requires that yearly production of concrete be below a maximum 150,000 cubic yards of concrete. Year to date production for 2015 has been as follows:

Calendar month in 2015	Cubic yards of production
January	100.5
February	117
March	490.25
April	2,085.25
May	2,301.25
June	3,117.50
Year to date total	8,211.75
Permitted maximum yearly production limit	150,000

Aggregate stockpiles; PTI No. 416-97A:

I observed the stockpiles being watered, and was informed by Mr. Theut that they water these daily. PTI No. 416-97A requires that visible emissions from each of the material storage piles not exceed 5% opacity. I did not see any visible emissions from the stockpiles.

6 drive-over hoppers; PTI No. 416-97A:

The 6 drive-over hoppers have grates above them. Trucks or front end loaders unload the aggregate through these grates.

Cement silo with baghouse; PTI No. 416-97A:

The cement silo's baghouse is cylindrical, and a pale green in color. No visible emissions were seen from it, during the course of the inspection.

Cement scale with baghouse; PTI No. 416-97A:

The baghouse between the for the cement scale is a small, box-like structure, in between the cement silo and flyash silo. I did not see any visible emissions from it, while waiting for a truck to be loaded.

Flyash silo with baghouse; PTI No. 416-97A:

The flyash silo is identifiable by the name *Erie* on the side. It has a square baghouse atop it. No visible emissions were seen from it, during the inspection.

Truck loadout area, with 2 drop chutes and voluntarily installed dust collector, PTI No. 416-97A:

I did not see any dust when I first arrived onsite today, and observed a truck being loaded, at a distance. Later, from within the control room, I observed another truck being loaded, and did not see any fugitive emissions.

Mr. Theut explained that Superior Materials voluntarily installed a dust collector this spring, for the truck loadout, to improve control of dust for that portion of the plant. This unit was purchased used. This voluntary installation of the dust collector/baghouse appears as if it meets the criteria for either of two exemptions from the requirement of Michigan Air Pollution Control Rule 201 to obtain a permit to install.

Rule 285(f) exempts:

(f) Installation or construction of air pollution control equipment for an existing process or process equipment if the control equipment itself does not actually generate a significant amount of criteria air contaminants as defined in R 336.1119(e) or a meaningful quantity of toxic air contaminants.

Rule 289(d)(ii) applies to concrete batch plants, and exempts:

(ii) The plant shall use either a fabric filter dust collector, a slurry mixer system, a drop chute, a mixer flap gate, or an enclosure for truck loading operations.

The control panel for the dust collector is in the plant control room. The panel has a pressure drop gauge, which did not appear to me to be working. Mr. Theut explained that it is not hooked up, and that they use visual and audio cues to monitor the unit for proper operations. They are able to tell from the sound of the unit that it is working properly, he explained, as well as they watch for any signs of visible emissions from the collector. This initially caused me some concerns, as AQD prefers that baghouses or other air pollution control devices have gauges to help monitor and ensure proper operations. However, my observations of the unit in operation, below, appeared to indicate that the unit is operating efficiently.

I stood outside of the plant, to the south and east of the dust collector, as a cement mixing truck was loaded. There were no visible emissions from the dust collector, at any time. There were briefly some fugitive emissions above the top edge of a rubber flap, or curtain, which provided some enclosure around the drop chutes for loading the cement mixing truck. The emissions were about 10% opacity, and lasted about 20 seconds. However, the sun was not at my back, so these would not be proper conditions for reading visible emissions, as they would tend to exaggerate the appearance of the emissions. The dust collector itself appeared to be functioning properly.

Mr. Theut explained that their policy regarding the new dust collector is to replace all the bags at the start of each operating season. The bags were replaced when it was first installed, this spring. During the operating season, he explained that they open the baghouse and clean it out, after every 300 yards of production. This is roughly every other week, depending on their rate of production. This allows them to check the condition of the bags, and they replace any that are damaged.

PTI No. 416-97A requires that visible emissions from any portion of the concrete batch plant not exceed

a 6-minute average of 10% opacity. Based upon the above instantaneous observations, the plant appeared to be well below a 6-minute average of 20% opacity.

Plant yard and roadways:

The plant yard and roadways were paved with concrete. I was informed that they do sweeping of the plant yard, as needed, with 7/10 being the most recent date. It has been an unusually wet summer for Michigan, and there were some puddles of water in the plant yard and roadways. I was also informed that they keep written records/logs of the dust control activities they do here. I did not see any fugitive emissions from plant roadways. The PTI requires that visible emissions from truck and loader traffic not exceed 5% opacity, and it appeared to me the plant is in compliance.

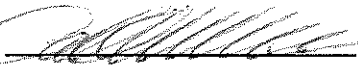
PTI No. 416-97A prohibits the use of any asbestos tailings or asbestos containing waste materials at the plant. I was informed that the plant does not use any of these materials.

I left the site at 1:55 PM.

Conclusion:

I could not find any instances of noncompliance. The facility appeared to be in compliance with the special conditions of PTI No. 416-97A. In recent years, the company voluntarily installed a dust collector to control emissions from truck loadout. This appears to have been exempt from needing a permit to install. This equipment was purchased used, and a pressure drop gauge was not hooked up to the unit. The dust collector appeared to be working properly, however, and the company has indicated that they are doing regular maintenance on it. As long as the unit is well maintained, the absence of a working pressure drop gauge does not appear to be a problem.

NAME



DATE

9/29/2015

SUPERVISOR

B. M.