

H6483

MAWILJ

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

H648359903

FACILITY: SUPERIOR MATERIALS LLC		SRN / ID: H6483
LOCATION: 20565 HOOVER STREET, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Mike Kroon , Area Manager		ACTIVITY DATE: 09/16/2021
STAFF: Gerald Krawiec	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection for FY 2021		
RESOLVED COMPLAINTS:		

AQD staff conducted a Scheduled Inspection for FY 2021 of Superior Materials, located at 20565 Hoover Street in the City of Detroit. The purpose of the inspection was to determine the facility’s compliance with applicable state and federal air pollution rules and regulations, and AQD’s PTI 137-18. Area Manager, Tom Peters accompanied AQD staff during this inspection.

BACKGROUND:

Since 1987 there has been a dry mix concrete batch plant at this location. The facility is located on a 1.95-acre parcel of land. Located near the intersection of Hoover and 8-Mile Roads in the City of Detroit. Wayne County Permits No. C-7496 and C-7497 were issued to Cornillie Fuel & Supply, Inc. for the installation of a Concrete Batch Plant with 2 Auxiliary Dust Collectors on January 22, 1987. Wayne County Permit No. C-10001 was issued for the installation of a Baghouse Dust Collector for Truck Loading Operations on March 5, 1993. At some time before the 2021 inspection the WC Permits were removed from the company file. I assume they have been voided, although I could not find them during a search of the void files.

In the year 2000, Superior Materials purchased and continued the operation of this facility designating it Plant #2. In August 2018, Superior Materials applied for a PTI and on October 17, 2018, was issued an Operating Program (PTI No. 137-18). The purpose of this PTI is to describe the tools and methods used to control fugitive dust emissions in accordance with Section 5524 of the Natural Resources and Environmental Protection Act, being MCL 324.5524, *Fugitive dust sources or emissions*.

This facility was last inspected by AQD on August 26, 2020. At that time, it was determined to be operating in compliance. There is no history of citizen complaints.

PROCESS DESCRIPTION:

The primary industrial activity at this 1.95-acre Site is the production and distribution of pre-mix batch concrete. Aggregates are delivered to the Site by truck. There are several 3-sided bins where trucks unload the raw materials. Raw materials are separated into the bins by aggregate size, there is also a sand pile. There is a water spray system directed at these bins, and sand pile that is used when needed to control dust. This system may also be used to control raw material moisture content when needed. Front-end loaders are used to load construction aggregates from storage bins and stockpiles into the concrete plant feed hopper. Cement, fly ash, and slag are delivered to the Site by truck and pneumatically conveyed into a designated storage silo. These products are stored in 3 separate silos,

emissions from each of the silo is controlled by a baghouse located at the top of the silo (3 baghouses).

Concrete production at the source is on a batch mixing basis, where aggregates, cement, additive chemicals, and water are conveyed directly into a concrete mixer/hauling truck aka transit mixer. Emissions from this truck loading operation are also controlled by a separate baghouse. The actual mixing of the product is completed in the transit mixer while traveling to the customers jobsite.

OPERATING SCHEDULE:

Superior Materials Plant #2 aka the Hoover Plant, operates on an as-needed basis only. Mr. Peters explained that when the main plant located on West Jefferson (Plant #32) in Detroit is near capacity, that is when this plant is called upon to supplement operations. Occasionally a jobsite may be located closer to the Hoover Plant, in that case it may be more efficient to deliver concrete from this location. A review of the company's production records confirms intermittent operation.

Only two employees are required to run the plant plus truck drivers. A review of 2020 and 2021 production records also confirm part-time operations.

INSPECTION NARRATIVE:

AQD staff conducted surveillance at this Site on May 14, 2021, and June 25, 2021, the gates were open however, it was not clear if the plant was operating either date. There were no visible emissions from the plant operations, track-out onto Hoover Road was minimal both days. On August 25, 2021, the plant was not operating, gates are locked. There is no evidence of track-out on to Hoover Road. My experience has shown that an inspection at this facility should be scheduled. When I am nearby this area, I often find the facility gates locked. I contacted the Plant Manager, Tom Peters and scheduled this inspection for September 16, 2021. I requested Mr. Peters, make copies of the 2020 and 2021 concrete production records, air permit required compliance and maintenance logs, and fugitive dust control logs. I wanted copies that I can take with me to review off-site. Having copies that I can take with me to review minimizes the person-to-person time spent at the plant during this current time of Covid-19 health concerns.

The plant is operating today, September 16, 2021, but not at full capacity. There was maintenance work going on and only a few transit mixers were loaded while I was on site. Fugitive dust was under control and the water spray system was operating for the 3-sided bins and piles. There were no visible fugitive emissions observed during the inspection, no track out or other evidence of a fugitive dust concern. This facility also has the City of Detroit required license from BSEED regarding storage piles and fugitive dust. Two City of Detroit inspectors conducted an inspection of the site a few weeks ago, no problems were identified.

Based on my inspection, the facility appears to meet the requirements of the Rule 289(2)(d) exemption, as discussed below:

Rule 289(2)(d)(i): Based on production records, the facility processed 50,301 cubic yards of concrete in 2020 and from January through August 2021, 49,724 cubic yards of concrete were processed, which is well below the exemption limit of 200,000 cubic yards per year.

Rule 289(2)(d)(ii): The plant utilizes a dust collector, drop chute, and enclosure for truck loading.

Rule 289(2)(d)(iii): All cement handling operations are either enclosed by a building or equipped with a fabric filter dust control.

Rule 289(2)(d)(iv): Facility maintains records of concrete produced on a monthly basis. These records were provided to AQD staff during the inspection.

Rule 289(2)(d)(vi): This concrete batch plant is located less than 250 feet from any residential or commercial establishment. Therefore, all the cement handling operations, excluding the cement silo storage, and loading operations are enclosed within a 3-sided structure.

EMISSIONS:

Potential emissions from the storage and handling of aggregate materials and dust emissions from paved and unpaved roads were calculated by the company. Per AQD's PTI 137-18, the particulate emissions were below major source thresholds. The PTE for controlled PM10 emissions is calculated to be 5.97 tpy based on a material throughput of 200,000 cubic yards per year. The material throughput for the year 2020 was 50,301 cubic yards, and for the year 2021 from January - August is 49,724 cubic yards.

POST INSPECTION:

Upon closing this inspection, I thanked Mr. Peters for following up on the old WC permits and having them voided. Those WC PTI's had obsolete, and redundant special conditions and Fugitive Dust Plans, that created a potential conflict with the Rule 289(2)(d) exemption.

I stated that I will be reviewing the company records off-site. I am taking copies of those records with me and if I have any questions or issues, I will be in contact with him.

OFF-SITE RECORDS REVIEW:

The concrete production records were reviewed for January – December 2020 and the production was 50,301 cubic yards. Copies are attached and demonstrate compliance. The concrete production records were reviewed for January – August 2021 and production is 49,724 cubic yards. Copies are attached and demonstrate compliance.

Records of yard sweeping, dust suppressant application, and stockpile watering from April through September 2021 are attached and demonstrate compliance.

Records of source-wide Fugitive Dust and sediment track-out routine inspections from April through September 2021 are attached and demonstrate compliance.

COMPLIANCE DETERMINATION:

Based on this plant inspection and the review of the conditions of Superior Materials Operating Program (PTI No. 137-18). Superior Materials Plant #2 aka; the Hoover

Plant is operating in compliance with applicable air quality rules and regulations, including operating within the requirements of Rule 289(2)(d).

NAME *A. Krawiec*

DATE *6/30/23*

SUPERVISOR *JK*