U33100501
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Ingham

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

U3310050140907

FACILITY: High Grade Materials Co.		**SRN / ID:** U33100501
LOCATION: 1800 Turner St., Lansing		**DISTRICT:** Lansing
CITY: Lansing		**COUNTY:** INGHAM
CONTACT: Mark Leyko , Assistant Manager/Sales		**ACTIVITY DATE:** 08/01/2017
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced inspection, prompted by a fellow inspector's description of fugitive dust seen onsite from vehicle traffic, during July 2017.		
RESOLVED COMPLAINTS:		

On 8/1/2017, the Michigan DEQ, AQD conducted an unannounced, self-initiated inspection of High grade Materials Co., at their Turner Street site. This was formerly owned and operated by Boichot Concrete. The purpose was to check compliance with the Michigan Air Pollution Control Rules, and to follow up on a fellow inspector's statement to me, a few weeks prior, that they had seen heavy fugitive dust from onsite vehicles, while driving by.

High Grade Materials is actually listed under 4 miscellaneous facility ID numbers in the Michigan Air Compliance Enforcement System (MACES) database, as follows:

1. High Grade Materials Co.; U33100501, the miscellaneous ID which this inspection activity report and prior activity reports have been entered under.
2. High Grade Materials; U33131969
3. High Grade Materials - Old Boichot Concrete Batch; U331601489
4. High Grade Materials Company; U33147707

Environmental contact:

Mr. Mark Leyko; Assistant Manager/Sales; 517-374-1029; lansing@highgradematerials.com

Emission units:

Emission unit*	Exemption rule	Compliance status
Concrete batch plant	289(2)(d)	Compliance

*An emission unit is any part of a stationary source which emits or has the potential to emit an air contaminant.

Regulatory overview:

This facility is considered to be a true minor source, rather than a major source of air emissions. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns.

It is also considered a minor, or *area source*, for Hazardous Air Pollutants (HAPs), because it is not known to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

The plant is subject to Act 451, Part 55, Air Pollution Control, and the Michigan Air Pollution Control Rules. The concrete batch plant may be considered exempt from the requirement of Rule 201 to obtain a permit to install, under the Rule 289(2)(d) exemption for concrete batch plants.

Fee status:

This facility is not a Category I fee subject source, because it is not a major source for criteria

pollutants. It is not a Category II fee-subject source because it is not a major source for Hazardous Air Pollutants (HAPs), nor is it subject to federal New Source Performance Standards. Additionally, it is not Category III fee-subject, because it is not subject to federal Maximum Achievable Control Technology standards. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Location:

The facility is adjacent to other industries, on its northwest corner and on its east side. However, to the immediate north is a Habitat for Humanity Restore, and another commercial building, and to the northeast and southwest are residences. The closest residences appear to be about 100 feet from the property line, from viewing a satellite image.

History:

This facility was most recently inspected by AQD on 10/5/2012, and prior to that, on 8/12/2010. AQD received two dust complaints in 2014, and one in 2012, from area residents, but has not received any since. This facility was previously owned by Boichot Concrete.

Arrival:

I drove by the site at 11:10 AM, to check for fugitive dust. I did not observe any fugitive dust or opacity from the roadways or the plant itself. Weather conditions were sunny, clear, and 80-85 degrees F, with winds 5-10 miles per hour out of the west.

Per the 2012 AQD inspection report by Brian Culham, this site is not open to the general public. I was not able to identify where the office was located, from offsite. I entered the site off of Benjamin Road. The site entrance there is just south of the Habitat for Humanity Restore. Parking appeared to be along the wall at the eastern edge of the site. As all the spaces were filled, I parked alongside another vehicle nearby, in what appeared to be an out of the way location.

I observed several silos onsite around the modern concrete batch plant, each equipped with a cylindrical baghouse on top. There were no visible emissions from the baghouses, the silos, or the batch plant, which is enclosed within a large metal-sided building. A covered conveyor belt led up to the batch plant. There were no visible emissions from the conveyor. There was water present on the paved concrete yard areas ahead of me, leading back to an area where concrete mixing trucks were being washed off, one at a time. Some of this water subsequently dripped onto the concrete pads, as they drove onsite.

I asked an employee in a nearby shop building for directions to the site office. I was led there, and was introduced to Mr. Mark Leyko, Assistant Manager/Sales. He explained that the previous environmental contact, Mr. Timothy Hubbell, is no longer with the company. I provided my identification/credentials, per AQD procedure. I also provided two copies of *The Permit to Install Exemption Handbook*, January 2017 edition; one copy for this site, and one copy for their Greenville corporate office.

I explained the reason for the visit, to conduct an inspection, and to follow up on a fellow inspector's comment from about 3 weeks prior that they had been driving by, and seen heavy dust from vehicles onsite. I was informed that they do regular sweeping of the onsite roadways, which are surfaced with concrete. I was told that this summer, because of the drought situation, they have been sweeping 3 times per week, whereas 2 times might be typical in a normal summer.

They also wash off trucks before they leave the site, I was told, to reduce trackout of dust. This was consistent with the washing of trucks that I had observed earlier. I also observed that water from the still wet trucks was distributed through the site as they drove, and may serve as additional control for fugitive dust.

I asked about the adjacent concrete-related facility immediately north of the High Grade site, and was informed that they have no connection with the adjacent Lafarge site (State Registration Number N6618)

to the north, at 1930 Turner Street, Lansing.

I was told that this was the second full summer that this plant has been running. I inquired about the demolition of the original concrete batch plant which had been at this site. Mr. Leyko indicated that it was removed last year. I asked if a 10-day advance notice had been given to AQD, prior to demolition, per the asbestos NESHAP. He explained that he had been assured by E.T. MacKenzie, the contractor who handled the demolition, that everything had been done properly.

Inspection:

Concrete batch plant; Rule 289(2)(d):

The plant was operating at this time, and I could not see any fugitive dust from the building housing the batch plant, the storage silos, nor any of the baghouses. Additionally, I could not see any fugitive dust from the covered conveyor belt that fed raw materials into the building enclosing the batch plant, nor from the aggregate storage area. All of the equipment appeared to be clean, in good condition, and to be operating properly. I did not see any fugitive dust from the weigh hoppers inside the structure which housed the batch plant.

This concrete batch plant essentially contains a primary plant and a secondary plant, I was informed. There were five storage silos, each equipped with a cylindrical baghouse dust collector. Mr. Leyko told me that they handle flyash, Type 1 Portland cement, and slag cement. I was shown their aggregate storage bins, where various aggregates, including washed 1" natural stone, and crushed stone, are stored. 6 of their storage bins are drive-over bins. The secondary plant of the concrete batch plant has its own storage bins, I was told.

There does not appear to be an air permit associated with this batch plant, but it appeared suitable to qualify for the Rule 289(2)(d) exemption for batch plants.

Rule 289(2)(d) exempts the following:

(d) A concrete batch plant that meets all of the following requirements:
(i) The plant shall produce not more than 200,000 cubic yards per year.
(ii) The plant shall use a fabric filter dust collector, a slurry mixer system, a drop chute, a mixer flap gate, or an enclosure for truck loading operations.
(iii) All cement handling operations, such as silo loading and cement weighing hoppers, shall either be enclosed by a building or equipped with a fabric filter dust control.
(iv) The owner or operator shall keep monthly records of the cubic yards of concrete produced.
(v) Before commencing operations, the owner or operator shall notify the appropriate district supervisor of the location where the concrete batch plant will be operating under this exemption.
(vi) The concrete batch plant shall be located not less than 250 feet from any residential or commercial establishment or place of public assembly unless all of the cement handling operations, excluding the cement silo storage and loading operations, are enclosed within at least a 3-sided structure.
(vii) The owner or operator shall implement the following fugitive dust plan:
(A) The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.
(B) On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing, or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within 6 inches of the top of any sideboard, side panel, or tailgate. Otherwise, the truck shall be tarped.
(C) All of the following provisions apply for site roadways and the plant yard:
(1) The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride, or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet an opacity limit of 5%.

(2) All paved roadways and plant yards shall be swept as needed between applications.
(3) Any material spillage on roads shall be cleaned up immediately.
(4) A record of all applications of dust suppressants and roadway and plant yard sweepings shall be kept for the most recent 5-year period and be made available to the department upon request.
(D) All of the following provisions apply for storage piles:
(1) Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.
(2) Stockpiles shall be watered on an as-needed basis in order to meet an opacity limit of 5%. Equipment to apply water or dust suppressant shall be available at the site or on call for use at the site within a given operating day.
(3) A record of all watering shall be kept on file for the most recent 5-year period and be made available to the department upon request.
(E) The provisions and procedures of this fugitive dust plan are subject to adjustment by written notification from the department if, following an inspection, the department determines the fugitive dust requirements or permitted opacity limits are not being met.

Rule 289(2)(d) discussion:

1. Rule 289(2)(d)(i) criteria: I inquired if the plant produced less than the maximum allowed amount of 200,000 cubic yards of concrete per year. Mr. Leyko showed me their handwritten recordkeeping which indicated that the plant produced 91,184.75 cubic yards in 2016.
2. Rule 289(2)(d)(ii) criteria: The plant uses a fabric filter dust collector for control of emissions from truck loading, one of the control options specified in this subrule. They also appear to utilize another of the options; enclosure, with a mechanical system to put an enclosure or shroud on 3 and 1/2 sides of the overhead loading system which dispenses cement, water, and aggregate into the mixing trucks. There was an air intake system at the center of the shroud or enclosure, and I could see that a light amount of fugitive dust which was generated was getting drawn into it.
3. Rule 2892)(d)(iii) criteria: All cement handling operations appear to satisfy the criteria be either enclosed by a building or equipped with fabric filter dust control.
4. Rule 289(2)(d)iv) criteria: It is my understanding that they keep monthly records of the concrete produced, satisfying this criteria.
5. Rule 289(2)(d)(v) criteria: It is unknown if the AQD District Supervisor was notified of the location of this concrete batch plant before it commenced operations.
6. Rule 289(2)(d)(vi) criteria: the cement handling operations occur within a four-sided structure. This appears to satisfy the requirement for all cement handling operations, excluding storage siloes and truck loadouts, to occur within at least a 3-sided structure.
7. Rule 289(2)(d)(iv) criteria: I did not discuss in detail the fugitive dust plan requirements of this subrule with Mr. Leytko. However, I did draw his attention to the exemption and its requirements in The Permit to Install Exemption Handbook. It was evident that the company is already taking measures to control fugitive dust. Any future discussions can focus on the specifics of their fugitive dust plan.

Conclusion:

I did not find any instances of noncompliance, nor any areas of concern.

NAME _____ DATE 9/29/2017 SUPERVISOR _____