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

P053949300

FACILITY: WEBER SAND & GRAVEL INC.-NORTH BRANCH		SRN / ID: P0539
LOCATION: 4242 Fish Lake Road, NORTH BRANCH		DISTRICT: Lansing
CITY: NORTH BRANCH		COUNTY: LAPEER
CONTACT: Gregg Weber ,		ACTIVITY DATE: 06/27/2019
STAFF: Daniel McGeen	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of plant while operating at 3178 S. Dye Road, Flint, where MacKenzie Crushing (N1332) had formerly been the site owner/operator.		
RESOLVED COMPLAINTS:		

On 6/27/2019, AQD conducted an unannounced scheduled inspection of the portable non-metallic mineral processing plant with State Registration Number (SRN P0539) owned/operated by Weber Sand & Gravel.

Environmental contact:

Mr. Gregg Weber, Owner; 801-614-4783; gregg.a.weber@gmail.com

Emission units:

Portable non-metallic mineral processing plant; General PTI No. 122-14, and 40 CFR Part 60 Subpart 000

Note: Impact crusher TC was built in 2016, and is subject to the stricter NSPS opacity limit for crushers constructed, modified, or reconstructed on or after 4/22/2008.

General PTI No. 122-14 was originally issued on 9/5/2014. It was updated on 5/9/2017 to reflect the addition of the following equipment:

Description of equipment	Device ID assigned by facility
Feeder	TF
Crusher	TC
Conveyor	TDC
Conveyor	TSD
Belt feeder	PSO
Conveyor	PSF
Screen	PSS
Conveyor	PSUS
Conveyor	PSFC
Conveyor	PSMC
Conveyor	PT3
Conveyor	TS130

Regulatory overview:

This facility is considered a minor source of criteria pollutants, that is, those pollutants for which a National Ambient Air Quality Standard (NAAQS) exist. These include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns (PM10), and particulate matter smaller than 2.5 microns (PM2.5). A major source of criteria pollutants has the potential to emit (PTE) of 100 tons per year (TPY) or more of any one of the criteria pollutants, and would be subject to the Renewable Operating Permit program.

This facility is also considered to be a minor or area source for hazardous air Pollutants (HAPs), because it has a PTE of less than 10 TPY for any single HAP and less than 25 TPY for all HAPs combined.

This facility is subject to 40 CFR Part 60, Subpart 000 - *Standards of Performance for Nonmetallic Mineral Processing Plants*. This New Source Performance Standard (NSPS) was updated in 2008. Table 3 to Subpart 000 sets a 12% opacity limit for affected facilities (as defined in Section 60.670 and 60.671 that commenced construction, modification, or reconstruction on or after 4/22/2008. Because the impact crusher TC was reported to be manufactured in 2016, it is subject to the NSPS 12% opacity limit for fugitive emissions. It should be noted that this limit is stricter than the 15% opacity limit for crushers in the General PTI No. 122-14, so there are two different opacity limits, both of which this crusher must meet.

Fee status:

This facility is not considered a Category I fee-subject source, because it is not a major source for criteria air pollutants. It is considered a Category II fee-subject source, because it is subject to a New Source Performance Standard. The facility reports emissions each year through the Michigan Air Emission Reporting System (MAERS).

History:

There are no known complaints associated with this site. The site was formerly owned/operated by MacKenzie Crushing, who had a portable plant here with the SRN N1332. The new site owner appears to be Aldridge Trucking.

Recent testing:

The impact crusher TC underwent opacity testing on 9/18/2017, according to the General PTI application forms when the General PTI No. 122-14 was updated on 5/9/2017.

Location:

The plant was to be at this site, per the company's relocation notice of 4/25/2019, more than the minimum required 10 days in advance of the proposed start date of 5/12/2019. Weber Sand & Gravel has an excellent track record of notifying the AQD Lansing District Office of all relocations. The proposed finish date was to be 7/1/2019, and the intent was to process 200,000 tons of material. This site is industrial, and was previously owned by MacKenzie Crushing, who is no longer in business. There are other industrial and commercial properties nearby. To the south and the north appear to be storage lots, for parking RVs, trailers, etc.

Note: the 10-day relocation notice requirement is undergoing change to a 2-day relocation notice requirement. The 10-day requirement was written before digital media were commonly used, and relocations are now received much quicker than through the U.S. Mail system.

Safety attire required:

Safety glasses with shields, hearing protection, hard hat, high visibility safety vest, and steel-toed boots.

Arrival:

Weather conditions were partly sunny, humid, and 74 degrees F, with no breeze, 9:29 AM. After several weeks of fairly steady rains, there had been a recent few days of dry weather, and the ground was beginning to dry out. This inspection was to check compliance with the facility's general permit, and to check on their efforts at fugitive dust control.

Dye Road starts out as a paved road, going westward into an industrial or business park. It becomes an unpaved road by the time it ends at a site where broken concrete is stockpiled. There was some fugitive dust from paved portions of the entrance road into the industrial park. Fugitive dust from truck traffic on the unpaved portions of the entrance road was heavier. I estimated 60-70% opacity, instantaneously, with the sun at my back. The road passed by more than one business, and it was not clear to me which

company would have responsibility for the road, or for what portion of the road.

I parked just east of an aggregate processing yard at the western terminus of the site roadway. I met with Mr. Mike Aldridge, owner of Aldridge Trucking, who informed me that they had purchased this site from the previous owner (MacKenzie Crushing). I asked Mr. Aldridge if they could address the fugitive dust. He promptly directed one of his employees to apply water to it with a front end loader. I witnessed a large amount of water being applied later, as I was preparing to leave the site, avoiding a violation for the crusher's fugitive dust control plan not being followed for the site roadways.

Note: it has been a subject of discussion with the regulated community and AQD as to who is responsible for dust control on site roadways for a portable crusher; the site owner or the crusher owner/operator. On occasion, AQD has cited both site owner, and the plant owner/operator.

Inspection:

The portable crushing plant was running. There initially was a small amount of fugitive dust from the crusher. It was backlit by the sun, and I was unable to make an accurate estimate, per guidance for EPA Method 9 visible emission reading. I asked one of the employees if they could add some water to the crusher, because I had some concern about the dust.

I was asked if they should shut the plant down, until they could get water on site. This is not a call which AQD inspectors are typically asked to make, and I did not instruct them to shut the plant down. However, they began the process of stopping operations. It was then explained to me that there was no water available onsite, and they had been relying on the natural water content in their raw material storage piles from several weeks of heavy rains. It was only a few days ago that drier weather had arrived. If they were required to run with water, they felt their only choice was to wait for a water delivery, which, they told me, could take hours.

As the crusher was shutting down, the opacity, backlit by the sun, became increasingly heavier. I was told that the plant gets dustier when it is shut down, and also when it is started up, when the only water available is the natural moisture content in their raw material. I was assured that if they were to start running again, the natural moisture content would control the dust, after a minute of dustier operation. I was shown the raw material storage pile, where a lot of visibly moist earth was present, along with large slabs of broken concrete.

I advised the crusher operator that if they began operating the crusher again, I would give them my assessment of whether their opacity levels met the general permit's opacity limits.

To view the crusher with the sun at my back, there were few safe locations where I had an unobstructed view of the crusher. I climbed atop a large section of concrete pipe, about 10-15 feet south of the screening process. From this vantage point, I did not feel I was 3 times the height of the emission source (the top of the crusher) from the crusher itself, and I did not take certified Method 9 visible emission readings.

Special Condition (SC) No. 1.2b of General PTI No. 122-14 sets a visible emission limit of 15% for all crushers. The crusher began operating, and, as I had been told, it was dusty at startup, when relying only on the natural moisture content of the aggregate. The first couple minutes were well over 20% opacity, peaking around 75%, by my estimate. Once fresh, damp raw material entered the crusher, all opacity from conveyors and the screening process dropped to 0%. Opacity from the crusher itself varied between 5 and 10%, with the sun at my back, occasionally peaking at 15%. I advised the plant contact onsite that if the dust from the crusher got any higher, they would be at their 15% permit limit, and would need to add water to stay in compliance.

Note: I did not recall, at the time of the inspection, the NSPS Subpart OOO 12% opacity limit for a crusher built on or after 4/22/2008, and it is unclear if the plant would have met this stricter limit, during its startup period. Following the inspection I became aware of this, and contacted Mr. Gregg Weber owner later, on 9/5/2019, as discussed later in this report. Crushers subject to the stricter NSPS limit should use 12% as the compliance limit., even though the AQD general permit sets 15% as the limit.

General PTI No. 122-14 SC No. 1.11 requires the equipment to be labeled according to the company-designated IDs specified in the permit application. I inquired as to the process equipment being labeled, per the PTI. I was shown the label on the crusher. The site was compact and busy, and I chose not to walk around all the process equipment, one piece at a time, not being familiar with the routing of heavy equipment at this site.

I inquired about recordkeeping for the plant, for how many tons had been processed. I was told that this is measured by the belt scale. I was advised that they had processed less than 200,000 tons at this site so far, and they would not exceed that amount here. This would be well below the maximum tonnage allowed per year per site under the General PTI No. 122-14, Special Condition No. 1.3.

A front end loader applied a large bucket load of water to the unpaved plant roadway, as I was preparing to leave. The roadway was appropriately wet as I left the site. This avoided a violation for the heavy fugitive dust that I had witnessed upon arrival today. Beyond the Aldridge site, the roadway had not been watered. It is not clear at this time who owns or is responsible for the site road to the east of their property. AQD will follow up, as time and resources allow.

No instances of noncompliance were initially determined, but subsequent review of special conditions of General PTI No. 122-14 has indicated noncompliance for the lack of water available to the plant. The Special Condition violated in the general PTI is No. 1.7, which reads as follows:

1.7 Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may be installed in lieu of water spray for any particular piece of equipment. The control equipment shall be properly operated as necessary to comply with all emission limits. (R 336.1205, R 336.1301, R 336.1303, R 336.1331, R 336.1910)

By not having water available, the water suppression system was not capable of operating properly at a time when it needed to be in use.

Post-inspection follow up:

AQD called Mr. Greg Weber later on 9/5/ 2019, to advise that they should water available onsite or very quickly available at all times, and that the lack of water available on 6/27/2019 was a violation of General PTI No. 122-14. It is not clear if the crusher could have met the 15% visible emission limit in the General PTI over a 6-minute average, if that included a period of startup or shutdown, without the benefit of water applied with water spray bars. Likewise, it is unclear if they could have met the stricter 12% limit contained in Table 3 of the updated NSPS Subpart OOO, for a crusher constructed on or after 4/22/2008.

Conclusion:

AQD called Mr. Weber on 9/5/2019 to advise that the plant was in violation of the General PTI 122-14 for not having water available for the control equipment (water suppression). A VN will be sent, requesting a written response with a corrective action program.

AQD also advised that the NSPS limit is 12% for a crusher built on or after 4/22/2008, like the 2016-built impact crusher designated TC. This limit must be met, in addition to the 15% limit in the General PTI No. 122-14. The General PTI has not been updated at this time to reflect the stricter federal requirement.

NAME



DATE



SUPERVISOR

