

N8316

MANILA
(PORTABLE)

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

N831652013

FACILITY: MID-MICHIGAN CRUSHING & RECYCLING INC		SRN / ID: N8316
LOCATION: 15111 Oakland ave, HIGHLAND PARK		DISTRICT: Lansing
CITY: HIGHLAND PARK		COUNTY: WAYNE
CONTACT: Vaughn Smith , President and Owner		ACTIVITY DATE: 12/18/2019
STAFF: Stephen Weis	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Site visit to investigate a report of dust from the company's portable crushing operation.		
RESOLVED COMPLAINTS:		

The following is a summary of compliance evaluations that were performed in relation to the Mid Michigan Crushing & Recycling crushing operation taking place at 18718 Borman Avenue in Detroit.

Initial Contact

On Wednesday, December 18, 2019, Ann Vogen of the EGLE Office of Waste Management and Radiological Protection (OWMRP) called to report a concrete crushing operation on the site of the former Borman/Farmer Jack warehouses and offices on the south side of Interstate 96, west of the Southfield Freeway. She reported that she and another OWMRP staff person were at an adjacent site, and that they observed dust coming from the area of the crusher. Ann sent me an e-mail with a picture that she took of some of the material storage piles on site. She sent me a follow-up e-mail later in the afternoon of December 18 letting me know the ownership of the property – the property is owned by Larry Mullins and Charles Stansley, and they are clearing the concrete building foundations from the property with plans to lease the property to an automotive company for vehicle storage. A copy of Ann's e-mail message is attached.

I went to the site later in the afternoon of December 18, arriving on site at around 4:15pm. I drove back to the property from the southbound Southfield Service Drive, driving along Borman Avenue past the Detroit DPW brush management yard. As I was driving back towards the crusher, a haul truck passed me as it was leaving the area, and it looked to be loaded with crushed concrete aggregate. The truck was kicking up a considerable amount of dust as it drove from the site. I parked my vehicle to the east of the crushing operation. At that time, the winds were coming from a westerly direction, blowing towards my location. I observed dust coming from the access roads and open areas around the crushing operation (the crushing operation consists of a crusher, conveyors, piles of concrete material to be fed to the crusher, piles of concrete material that has been crushed to size, and a mobile office). The crusher was operating at the time, and I observed dust blowing from the crusher, and some from the drop point from the conveyor to one of the finished material piles (despite the drop height being small). There was no water being sprayed at any point along the concrete crushing process. There looked to be one person on site who was operating the crusher, and there was only one vehicle.

I returned to the site with Todd Zynda of the EGLE-AQD Detroit Office on Thursday, December 19, arriving at around 1:15pm. The crusher was not in operation at the time, but there were more people on site. I noted that a truck on site had a door label that read "Mid Michigan Crushing & Recycling". Todd and I were met by Eric Huff, a foreman for Mid Michigan. We asked Eric for some information about the crushing operation at this location. He told us that the crusher has been at the Borman location for a week to 10 days, and that it would be operating at this location for about another month in order to complete the job. Eric told us that the property is owned by Larry Mullins, and that he contracted with Mid Michigan to crush the concrete from the building slabs on the property.

I discussed my observations from the previous day of excessive dust blowing from the crusher operation and the roadways. I asked if any water or dust suppressant was being used to control dust. Eric replied that there was no water being used due to the cold temperatures. Todd and I advised that if the crusher and associated material conveyance equipment is used, Mid Michigan is responsible for controlling dust/particulate emissions. I asked whether the crusher is permitted, and Eric replied that the crusher should be permitted, and that correspondence should have been sent to EGLE-AQD notifying of the relocation of the crusher to the Borman location. We discussed the opacity limits that apply to the operation of the crusher and associated equipment, as well as to the material storage piles and to the traffic areas of the operation. Eric said that the crusher was initially evaluated for opacity by a consultant after it was first permitted. I provided Eric with my contact information, and

he told me that he would provide it to the company office in order that someone would contact me to provide me with the permit number for the crusher and the specifics of the relocation notice. Eric also provided me with the contact information for the owner of Mid Michigan, Vaughn Smith.

When I returned to the office later on the afternoon of December 19, I had received an e-mail message from Madison Wennersten, Office Manager for Mid Michigan. She provided me with the SRN for the crusher (N8316), and the permit number (PTI No. 188-09), which corresponds to a General Permit to Install for Nonmetallic Mineral Crushing Facilities. She also wrote that she sent a relocation notice addressing the crusher's move to the Borman location at the beginning of November. Based on this information, I was able to locate the General Air Permit to Install Application Relocation Notice that was submitted by Mid Michigan in the AQD Detroit Office files; it was signed by the company owner on November 5, 2019, and stamped as being received at the EGLE-AQD Detroit Office on November 12, 2019. The Relocation Notice, which includes a site map, identifies the new plant location as the "Former Farmer Jack distribution center", with an address of 18718 Borman Rd in Detroit. The form provides that 40,000 tons of material is to be processed at this location, and that the plant (crusher) will be located at the Borman location from 11-19-19 to 12-27-19. The Relocation Notice also included information about the crusher from the PTI application. The crusher is an Eagle model 1400-450C, serial number 30968, with a maximum rated capacity of 175 tons per hour, and the emissions control type is specified as water spray.

The Test Report for Visible Emission Observations, as required by 40 CFR Part 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), was also in the facility file for this particular Mid Michigan owned and operated crusher. The visible emission compliance testing, which satisfies the requirements of Subpart OOO and Special Condition 1.8 of PTI No. 188-09, was conducted on October 14, 2011.

Later in the afternoon of December 19, I called and spoke with Vaughn Smith of Mid Michigan, and we discussed the operation of the crusher at the Borman location. I asked Vaughn if the concrete material that is being processed by the crusher has been tested for the presence of asbestos containing waste materials, or ACWM. Special Condition 1.5 prohibits the crushing of any asbestos tailings or ACWM, as defined in 40 CFR Part 61 Subpart M (National Emission Standard for Asbestos). I provided that it is possible that any utility conduits that may have been left in the concrete slab could contain asbestos. Vaughn replied that to his knowledge, there was not a check for asbestos. He stated that Mr. Mullins would most likely be the person who would have had the concrete slab checked for asbestos. Vaughn said that asbestos is a common check for jobs that his company does. He said that his company is more concerned about asbestos when there is still a vertical building structure remaining, and that slabs are less of a red flag in terms of the potential presence of asbestos. He further said that he does not think that there should be any asbestos in the concrete, which was part of a floating slab, that his staff did not find any conduit, and that his staff is trained to look for issues such as this.

We then discussed fugitive dust/particulate control at the Borman site. I asked Vaughn if Mid Michigan has been using a water spray to control dust from the operation of the crusher and its associated equipment. Special Condition 1.7 of the PTI requires that the control equipment be "...properly operated as necessary to comply with all emission limits." Vaughn replied that the company's water truck was just coming back on-line after maintenance, and that he was in the process of driving it to the Borman site. He said that they have a hard time using water when the ambient temperature gets below 28-30° F. He said that Mid Michigan blends moist soil with the material that is being processed in the crusher to prevent dust. He said that when they first started operating at the Borman site, there was a lot of wet soil mixed with the concrete, but that the colder temperatures and wind dried the material. Vaughn acknowledged that with the warmer weather forecasted after the 19th, water should be utilized. He said that with temperatures over 28° F, Mid Michigan could utilize a fire hose equipped with a broad tip to spray that material that is to be crushed. The company typically logs the amount of water that is used for dust suppression using a hydrant meter.

We then discussed the ground around the crushing operation. I described the dust that I observed blowing from the roadways leading to and from the crusher on the 18th. Vaughn said that Mid Michigan is used to working on bare ground, which allows dirt particles to bind, whereas the Borman site is a concrete slab. I suggested applying a dust suppressant, and limiting the speed of vehicles traveling on and to and from the site. Vaughn replied that Mid Michigan does apply chloride solutions at work sites to control dust. He said that he would have a pallet of calcium chloride sent to the Borman site. Regarding speed limits, Vaughn said that limiting vehicle speeds at work sites is one of the company's primary dust control measures; they typically limit trucks to 5 mph. He told me that that trucks that were driving to and from the site are the responsibility of the property owner, Mr. Mullins. Vaughn said that he called Mr. Mullins after hearing that AQD was on site to let him know about the dust, and to tell him that the trucks need to observe a low speed limit. Vaughn said that when he

spoke with Eric Huff earlier, he was told that the trucks are going slow today.

Vaughn acknowledged that the crushing operation at the Borman site was creating too much dust. He said that his staff should have known to cease operating on the 18th with the moderate winds and no water. He acknowledged that the company was focused on getting the crusher ready and operating, and that they lost their focus in terms of controlling dust. He said that the property owner was not ready for them on the date that Mid Michigan was scheduled to set up and begin operating at the Borman site (November 19), and they are now operating so as to complete the job prior to sub-freezing weather. Vaughn also told me that Mid Michigan was supposed to crush 40,000 tons of material, but that the property owner added additional material (a gravel-like material) to be processed by the crusher. I advised Vaughn that Mid Michigan should submit a revision to the Relocation Notice to provide AQD with an updated expected amount of material that will be processed at the Borman site, as well as an updated operating schedule indicating how long the crusher will operate at the site.

Follow-up Visits

December 26 and 27, 2019

I performed surveillance of the crushing operation on both of these days at around 9:15am. On the 26th, I observed the crusher from the residential neighborhood to the south, and on the 27th, I observed the operation from Interstate 96. On both of these occasions, that crusher was not operating.

January 3, 2020

I performed surveillance of the Borman site at around 9:15am. I surveyed the crusher from the residential neighborhood to the south, viewing it from the northern terminus of Glastonbury Street as it runs north from Wadsworth Street. The crusher had been moved to another location on the Borman site, and it was now operating much closer to the residential properties. I did not observe excess dust.

I returned to the Borman site at around 2:35pm with a measuring wheel that was borrowed from staff in the Detroit Office of EGLE's Office of Waste Management of Radiological Protection. I started measuring at the masonry wall that separates the residential properties to the south of the crusher, and I walked towards the crusher, rolling the wheel the entire time. When I reached the crusher, the wheel read 168 feet. A copy of the wheel with my measured read-out, which was taken when I arrived back at the AQD Detroit Office, is attached for reference.

I spoke with the three Mid Michigan staff who were on site, and with Larry Mullins, the property owner. I asked about the relocation of the crusher on the site. I was told that the crusher had been moved "a day or two" prior to operate closer to the pile of concrete material that is to be crushed. I showed the group the permit condition that requires that the crusher be located and operated a minimum of 500 feet from any residential or commercial establishment, and I shared my measurement of the current location of the crusher relative to the closest residential property line with them. I advised that the location of the crusher is a violation of the permit for the crushing operation, and that a Violation Notice (VN) would be issued. We also discussed the use of water to control dust from the crushing operation. There was no water being used at the time, and I observed some visible emissions (5-10%) coming from the crusher and one of the conveyor drop points. I was told that water was not being used due to the colder temperatures, but that water was available and could be hooked up. I advised that measures should be taken to minimize particulate/fugitive dust emissions from the crushing process.

I asked Mr. Mullins if the concrete material from the building slabs that is being processed by the crusher had been tested for the presence of asbestos. He told me that an assessment was done prior to dismantling the slab; the assessment involved checking for the presence of asbestos, and testing the soil underneath the slab. Mr. Mullins said that no asbestos was found. He was familiar with the utility conduits and said that the conduits at the Borman site were made of metal, and that no asbestos was found. He also said that the soil tested clean, and that 20,000 cubic yards of the soil was provided to the City of Detroit for use as fill material at residential demolition sites. Mr. Mullins said that he would send me a copy of the survey that was done at the Borman site.

I called Vaughan at 4:20pm to let him know about my earlier site visit; he said that he was told of my visit and my finding of a violation. He said that he was out of town when the crusher was moved, and that he would be going out to the site tomorrow to take a look at the site. He asked about the VN, and what he would need to do in response. I advised that the VN will require a written response within 21 days of the date of the VN. I told him

