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MWILL

DEPARTMENT OF ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 ACTIVITY REPORT: Scheduled Inspection

B656335373

FACILITY: DETROIT RECYCLED CONCRETE		SRN / ID: B6563
LOCATION: 14294 MEYERS, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Brett Warstler, Plant Manager		ACTIVITY DATE: 07/13/2016
STAFF: Terseer Hemben	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: PM and record keeping		
RESOLVED COMPLAINTS:		

Scheduled Compliance Inspection

Detroit Recycled Concrete

14294 Meyers Detroit, MI 48227 Phone: 248-553-0600, Cell: 810-343-3848

SRN: B6563

Permit#: WC C-11557, C-11558, C-11559

Responsible Official: Mr. Brett Warstler

Date: July 13, 2016

BACKGROUND

The Detroit Recycle Concrete (DRC) is located at 14294 Meyers, Detroit, Michigan. The DRC crushes concrete and reclaimed asphalt product (RAP). Eighty percent of their annual throughput is concrete, and remaining Twenty percent is RAP. Concrete and paving companies are their main source of concrete and RAP. DRC provides different grades of aggregate for paving contractors. DRC is owned by the same people who own Nagel Paving, and Nagel paving is DRC's biggest customer.

The crushing plant consists of a feed hopper, grizzly feeder, primary inground crusher (Pioneer model 2854), portable secondary crusher (Hazemag model ASPE 1315QL), Deister 7 x 20 portable desk screen and five conveyors. Diagrams of the equipment are available on AQD file. DRC operates an 8 hour day schedule from Monday to Saturday (48 hours per week or 2400 hours per year.).

Inspection Narrative

I arrived at the facility premises on July 13, 2016 at 1000 hours. Temperature at the hour was 78 F and wind speed 6.9 mph coming from the W. Humidity was 74%. The purpose of visit was to conduct an annual scheduled inspection for compliance with emissions of particulate pollutants and recordkeeping on concrete crushing and manufacturing at the facility. I met the site Manager, Mr. Brett Warstler. We entered the office and settled down for a pre-inspection conference. The manager informed the facility receives concrete and RAP from mainly one concrete paving customer. Other suppliers that bring concrete to the facility are advised not to bring any asbestos containing materials. The facility has a 500 gallon tank that stores water for dust suppressant and associated utility applications. The facility kept records electronically offsite. We drove around the concrete processing premises and observed the dust

suppressant and dust sweeping equipment on the site. We held a post-inspection conference after the drive-through. Mr. Wrestler answered all the questions I asked during the interview satisfactorily. I requested hard copies of fugitive dust abatement compliance activities and operation emission records. I left the area at 1140 hours.

COMPLAINT/COMPLIANCE HISTORY:

There have been fugitive dust complaints registered against DRC and resolved at the site.

OUTSTANDING LOV'S:

None

PROCESS DESCRIPTION:

The DRC crushes concrete and RAP at the Meyers location. The primary crusher is stationary. The secondary crusher is portable. DRC does not move the secondary crusher. Particulate emissions are controlled by water sprays.

EQUIPMENT AND PROCESS CONTROLS:

The DRC operates the Crushers and screens under Permit C-11557-C-11559. The permit allows the crushing and mixing of concrete and RAP with use of water as fugitive dust and emission controls. The control condition is federally supported by rule 40 CFR 60, Subpart A and OOO as spelled out in Special Condition 17. All equipment associated with the concrete manufacturing process is permitted.

OPERATING SCHEDULE/PRODUCTION RATE:

The DRC is set to operate 24 hrs. a day, 7 days a week, and 365 days in the year. However, the business operates a one 8- hour schedule for six days per week.

APPLICABLE RULES/PERMITS C-11557, C-11558, C-11559

NSPS 40 CFR 60 Subpart A and OOO

State: R 201, R 301, R 373, R 901 considerations apply

Based on the above permit rules guiding the crushing and mixing of concrete and RAP, Staff observed the following:

Pioneer model 2854, portable secondary crusher (Hazemag model ASPE 1315QL), Deister 7 x 20 portable desk screen, and five conveyors operated-

1. In compliance – DRC stated there has not been any modification to any system, and/or process at the DRC facility since last 2 years consistent with Rule 201 (1) [Response pg. 2, Item# 1].
2. In compliance – DRC stated the visible emissions from the crushing plant did not exceed 10% opacity, based on the Federal Standards of Performance for New Stationary Sources, 40 CFR 60, Subparts A and OOO [SC 17]. Records submitted by DRC stated the Company trained the manager, Mr. Brett Warstler in observation and reporting of the opacity of visible fugitive emissions. Thus the plant had not exceeded 10% opacity of the visible emissions from the crushing. The plant employs a very effective curtain spray system that is always in operation while the crushing is in operation [Response pg. 2, Item# 2].
3. In compliance - DRC stated within 60 days after achieving maximum production rate,

but not later than 180 days after commencement of trial operations Federal Standards of Performance for New Stationary Sources require evaluation of visible emissions from the crushing plant, at owner's expense, in accordance with 40 CFR 60 Subparts A and OOO. Visible emission observation procedures must have prior approval by the Department of Environmental Quality Supervisor [SC 18]. The AQD Orange file indicated the testing of process was conducted accordingly on September 16 and 17, 1998 through Derenzo and Associates, Inc. on behalf of SME and Detroit Recycled Concrete, and results were submitted to the Wayne County Department of Environment, Air Quality Division on September 28, 1998. The testing results showed the average opacity of fugitive dust emissions from the equipment was 0% to 5% [Response Pg. 2 Item# 3]. The DRC operated in compliance.

4. In compliance- DRC demonstrated a written notification of the actual date of initial startup of the crushing plant was required to comply with Federal Standards of Performance for New Stationary Sources, as specified in 40 CFR 60, Subpart A. This notification was submitted to the Office of the WCDE [SC. 19]. Records submitted by DRC showed the Company notified the Wayne County Department of Environment on June 27, 1997 about start up. The facility was inspected onsite and issued 3 certificates of operation by the permit Engineer [Response pg. 2, Item# 4].
5. In compliance - DRC demonstrated permittee did not process more than 180 tons of concrete per hour nor 480,000 tons of concrete per year through the crushing plant, based on a 12-month rolling average as determined at the end of each month. A record of concrete processed through the crushing plant was kept on file for at least 2 years and made available to DEQ-AQD [SC. 20]. Records covering the period 2010 through 2015 showed the facility did not exceed the limit of 480,000 tons per year. DRC processed concrete at an average 103 tons per hour in 2015 and 2016 [Attach-Response pg. 2 and 3].
6. In compliance - DRC demonstrated permittee did not process more than 180 tons of reclaimed asphalt pavement (RAP) per hour or 120,000 tons of RAP per year through the crushing plant, based on a 12-month rolling average as determined at the end of each month. A record of the amount of RAP processed through the crushing plant was kept on file for a period of at least two years and made available to the DEQ-AQD [SC. 21]. Records covering the period 2010 through 2015 showed the Company did not exceed the yearly limit [Response pg. 16, Item # 6]. Spot calculations for hourly crushing showed DRC crushed an average 569 tons per year of RAP in 2015, and 250 tons per year in 2014.
7. In compliance - DRC demonstrated the permittee equipped and maintained the Pioneer primary crusher, the Hazemag secondary crusher, and the Deister triple deck screen with water sprays. Whenever the pioneer primary crusher, the Hazemag secondary crusher, and the Deister triple deck screen were operated at ambient temperatures greater than 32 degrees F, the water sprays were also operated [SC. 22]. Response from DRC stated the Company equipped and maintained a water spray system on the primary crusher, secondary crusher, screen docks and discharge points at the 24th conveyor, 36 inch conveyor, and 42 inch conveyor. The water spray system is turned on whenever the plant is operating. Staff verified during the inspection. However, the plant does not run the water spray system when the temperature is below 32 F [Response pg. 2, Item# 7].

8. **In compliance DRC demonstrated the permittee did not operate the crushing plant unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix A of the Permit was implemented and maintained [SC 23]. Response from DRC provided a fugitive emission plan that was submitted to Wayne County Department of and Environment [response pg. 3, Item# 8]. Staff verified the fugitive dust suppressant was applied, and water truck was onsite applying suppressant to roadways.**
9. **In compliance – DRC stated the permittee did not crush any asbestos containing waste materials as defined by the NESHAP regulations- 40 CFR 61.143 [SC 24]. Response from the Company stated that DRC only allows the dumping of broken concrete for processing. All parties bringing construction debris are rejected and directed that such materials to authorized dumps. Asbestos or shingles are under no circumstances accepted at the site [Response pg. 3, Item# 9].**
10. **In compliance –DRC demonstrated the permittee kept records as specified in the fugitive dust control program attached in Appendix A. These records were kept on file at the facility for a period of at least two years following the date of such records and were made available to the DEQ-AQD upon request [SC 25]. Records submitted by DRC cover production, sales, weather and fugitive dust controls implemented program [Response pg. 17-44, Item# 10].**
11. **In compliance – DRC demonstrated the visible emissions from any roadway, parking lot, or storage pile, including any material handling activity at a storage pile did not exceed 5 percent opacity, as determined using the Reference Test Method 9d, described in Section 5525(j) of Michigan Public Act 451 Of 1994, facility keeps and maintains daily and annual records of the amount of material processed for each site at which the Company operates [SC 26]. Records submitted by the DRC showed invoices for purchase of dust suppressant (Calcium Chloride) used at the site. Several surveillance visits to the facility in the past observed fugitive dust suppressant application using water spray truck, onsite water spray and roadway sprays. DRC stated Brett Warstler, the Plant Manager, is trained in observation and reporting of opacity. Brett verbally explained the Company owns and operates water trucks that serve around the locations that need dust suppression. The Company did not keep records of the daily or monthly nor annually spray activities per location. Staff observed trucks performing fugitive dust suppressant application at the site on several visits. Staff requested DRC to start keeping daily and annual records summary of fugitive dust control activities [Attach-Response #3, pg 8-15].**

Discussion

Rule 201(1) -The DRC crushing equipment were permitted and numbered C-11557-C-11559 consistent with Rule 201. No change or modification had been made since permitted in 1996.

Rule 301 (c) - the rule was addressed through provision of Special condition 17 to meet the compliance requirement.

Rule 224 was not violated. The overall criteria pollutants identified with emissions at the facility are not on the list of toxic contaminants listed under section 112(b) of clean air act [Attachment pg. 7].

NSPS 40 CFR 60, Subpart OOO (section) 672 is addressed in the Special Condition 17 of permits C-11557-C-11559 limiting the visible opacity to 10% monitored by a trained operator in use of method 9. The facility operates water Trucks to regularly spray dust suppressant on roadways, driveways, piles and premises.

Rule 205 – The facility is defined as a minor source using emissions calculations during permit application. The permit was approved based on the estimated emissions classifying the facility as B in the codes used by the Wayne County Department of and Environment.

Rule 373 – The fugitive dust control program outlined in Appendix A of the Special Conditions addresses the required compliance. The facility provided an adequate fugitive dust abatement program.

Determination

The AQD determined the Detroit Recycle Concrete facility located at 14294 Meyers, Detroit was operated in compliance with Permits C-11557, C-11558 and C-11559 conditions. There were no odors at the facility or surrounding premises at the time of inspection. The company kept calculations and records in the required format.

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DATE 9/30/16 SUPERVISOR JK