

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

N317145099

FACILITY: STATE CRUSHING INC		SRN / ID: N3171
LOCATION: 2260 AUBURN RD, AUBURN HILLS		DISTRICT: Southeast Michigan
CITY: AUBURN HILLS		COUNTY: OAKLAND
CONTACT: R.J. Orozco , Owner		ACTIVITY DATE: 05/01/2018
STAFF: Adam Bognar	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Self-Initiated Inspection		
RESOLVED COMPLAINTS: C-18-00993		

On Tuesday, May 1, 2018, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) staff, I, Adam Bognar, and Kerry Kelly conducted an unannounced targeted inspection of State Crushing Inc., located at 2260 Auburn Road, Auburn Hills, MI. The purpose of this inspection was to determine the facility's compliance status with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) rules; Permit to Install No. 8-16; and 40 CFR Part 60 Subpart 000 – Standards of Performance for Nonmetallic Mineral Processing Plants. Additionally, this inspection was conducted to follow up on an opacity complaint MDEQ-AQD received on April 26, 2018 (Complaint #: C-18-00993).

We arrived at State Crushing (the "facility") at around 9 am and met with Ms. Jody Robinson, Controller. We identified ourselves and stated the purpose of the inspection. I informed Ms. Robinson that we received a complaint on April 26, 2018 alleging that dust from State Crushing Inc. was being blown into the air. While waiting for Ms. Robinson to gather records, we walked outside to observe the activities in the area. Mr. R. J. Orozco, owner, met us outside and gave us a tour of the crushing plant and explained the process and emission/dust control methods.

State Crushing receives chunks and slabs of concrete that are excavated from various construction projects. The on-site crushers process this concrete into smaller diameter chunks that can be sold as a base for roadways and other projects. Additionally, they sell landscaping supplies such as soil, mulch, sand, and other stones.

### **PTI No. 8-16 – EUPROCESS**

This emission unit includes a primary crusher, secondary crusher, conveyors, a feed hopper, screens, and material drop/transfer points. The larger blocks are loaded into the crusher hopper by a front-end loader tractor. The primary crusher crushes the concrete to a uniform size so that they can be processed by the secondary crusher. The secondary crusher produces chunks that are roughly three inches in diameter or smaller. Next the concrete chunks pass over filter screens which separate the chunks based on diameter. Anything larger than three inches is recycled back to the secondary crusher.

Emissions from the crushing process are controlled by keeping the concrete material wet. A crusher operator located next to the primary crusher manually sprays the concrete with water as it enters the primary crusher. Manually spraying of the concrete is important because water needs tend to fluctuate during operation. The concrete must be damp to avoid dust issues, but not so wet that concrete becomes muddy and clumps together. The second crusher is equipped with an automatic water spray nozzle. Some of the conveyor belts are equipped with automatic sprayers which spray the crushed material at drop points. Water for the facility is pumped from the nearby Clinton River. This withdrawal is covered by MDEQ Storm Water Permit # I-13134.

State Crushing plans to replace their current secondary crusher with a new crushing unit. Kerry Kelly informed Ms. Robinson that they will need to modify their air permit to reflect the replacement of this crushing unit. I sent Ms. Robinson an air permit to install application.

Section I – S.C. 1: States that visible emissions from the drop point and transfer point portions of the crushing process shall not exceed 10% opacity. I did not notice any opacity at the drop/transfer points in the crushing process. The crushed material appeared to be adequately wetted to minimize dust emanating from material transfer points.

Section II – S.C. 1: States that the permittee shall not process any asbestos containing material. Ms. Robinson stated that to her knowledge no asbestos containing materials are processed. Dust samples were collected from this facility during a complaint investigation on April 14, 2016 by AQD staff Tyler Salamasick (Complaint # C-16-02057). Analysis of the samples at the Grand Rapids Environmental Laboratory indicated that no asbestos was present in the collected dust samples.

Section II – S.C. 2: This condition limits the amount of material processed to 2250 tons per day and 310,500 tons per 12-month rolling time period. To demonstrate compliance with this condition the facility keeps records pursuant to "EUPROCESS Section VI – S.C. 2" of this permit to install. Production records from January 2017 to May 1, 2018 indicate that State Crushing is below this production limit. Production is estimated by multiplying the daily operating hours by the maximum achievable production rate of 200 lbs/hour. I collected copies of these records (Attachment 1).

Section III – S.C. 1: Stipulates that State Crushing shall not operate any portion of EUPROCESS unless the opacity limits outlined in Appendix A are adhered to. I did not notice any exceedance of these opacity limits during my inspection.

Section III – S.C. 2: Stipulates that State Crushing shall not operate the crushing process unless the fugitive dust plan outlined in Appendix B is implemented and maintained. The fugitive dust plan appeared to be implemented and maintained correctly. I did not notice significant dust coming from the crushing process or the plant yard; however, there was a significant amount of track-out and dust on Auburn Road. Kerry Kelly suggested to Mr. Orozco that some of the track-out may be due to overwatering the plant yard, creating excess mud that sticks to tires. The mud gets tracked out onto Auburn Road where it dries and gets kicked up by traffic. This causes a dust cloud to be formed above the road. We informed Mr. Orozco of our concern with the amount of dust generated from the track-out. It is important to note that the track-out appears to be generated not only by State Crushing but by multiple neighboring facilities as well.

State Crushing has made efforts to remedy this track-out situation by contracting two sweeping services to clean Auburn Road periodically. One sweeping company, Sweepmaster, comes out once per month, while the second sweeping company, Rolar Property Services, Inc., comes out at least twice per month or more if required. Ms. Robinson informed me that Sweepmaster does not utilize water on their sweepers. Sweepmaster's sweeper was present during the inspection and appeared to be making the dust problem over Auburn Road worse. Rolar Property Services, Inc., does utilize water in their sweepers.

Section III – S.C. 3: States that the facility shall comply with 40 CFR Part 60 Subparts A and OOO. The facility appeared to be operating in compliance with these standards, with one exception: no initial visible emissions testing was performed for EUTRUCKTRAFFIC or EUSTORAGE within 180 days of the issuance of this permit. This is a violation of permit

conditions and 40 CFR Part 60.11(b) Subpart A. I informed Ms. Robinson via a phone conversation on May 21, 2018, that these readings need to be taken from now on. Ms. Robinson agreed to start taking these visible emission readings of EUTRUCKTRAFFIC and EUSTORAGE.

Section III – S.C. 4: Requires periodic inspections of water sprays. State Crushing performs daily inspections on the water pump, filter, line, and spray tips. Records of these daily inspections are maintained. These records also indicate when the water truck wets the yard. I collected copies of these records from the start of 2018 operation to May 1, 2018 (Attachment 2).

Section III – S.C. 5: States that the input feed to EU process must be ceased if any malfunction of the control device (water sprays) occurs. Mr. Orozco stated that no control malfunctions have occurred recently.

Section III – S.C. 6: Requires a certified Method 9 Visible emissions reader be onsite at all times during the operation of EUPROCESS. According to Ms. Robinson, the certified reader was taking the Method 9 certification test during my inspection. Ms. Robinson emailed me the certification after the inspection on May 3, 2018 (Attachment 3). Mr. Manuel Orozco is the Method 9 certified emissions reader for this facility. The certifying agency is AeroMet Engineering, Inc..

Section IV – S.C. 1: States that the crushing process shall not be operated unless the water sprays are installed, maintained, and operated in a satisfactory manner. The water sprays appeared to be functioning as intended during the inspection. I did not notice significant dust coming from the crushers.

Section V – S.C. 1: States that any new or additional equipment associated with EUPROCESS that is subject to NSPS Subpart OOO, which has not been previously tested, shall comply with the testing requirements of NSPS Subpart OOO. Ms. Robinson stated that the secondary crusher will likely be replaced in the next couple of months. AQD staff informed Ms. Robinson that testing will be required upon replacement of the secondary crusher.

Section V – S.C. 2: Requires visible emissions testing to be performed on EUPROCESS within 180 days of permit issuance. This testing was performed on Tuesday, September 27, 2016 from 10 am – 12 pm. The results were received by AQD on October 27, 2016. There were no indications of opacity exceedances based on this test.

Section VI – S.C. 1: Requires the permittee complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month. Calculations appear to be in an acceptable format.

Section VI – S.C. 3: Requires that State Crushing perform six-minute visible emission readings of the crushing process periodically. The current agreement between the AQD and facility is one method 9 visible emissions reading per week. Records of these readings were kept for the previous operating season (2017) (Attachment 4). Visible emission readings have not been taken since the start of 2018 operation since their method 9 reader was not yet certified. Ms. Robinson was under the impression that the readings were not yet necessary since they were not operating at maximum capacity for the 2018 season. I informed Ms. Robinson that my interpretation of the permit condition is that periodic readings need to be taken regardless of production rate. Readings should be taken during maximum routine operating conditions for the day the readings are taken. Ms. Robinson agreed to start taking

these readings after the date of this inspection (May 1, 2018) and also agreed to comply with this condition in the future.

Section VI – S.C. 4: Requires State Crushing to perform daily inspections and record the condition of process equipment and control devices prior to start up. State crushing maintains daily records of these inspections. I reviewed these records for the current operating season and found them to be approvable. I collected copies of these records (Attachment 2).

Section VI – S.C. 5: Requires State Crushing to keep records of six-minute visible emission readings of EUPROCESS pursuant to S.C. 3 of this section. The facility keeps records of these visible emission readings.

Section VI – S.C. 6: Requires State Crushing to maintain a log of maintenance activities conducted and repairs made to EUPROCESS and control devices. These records are kept along with the daily inspection records for the EUPROCESS fugitive dust control equipment. I reviewed and collected records of these activities for the 2018 operating season, beginning on April 16 (Attachment 2). There have not been any maintenance activities during this operating season.

Section VII – S.C. 1: Requires State Crushing to provide written notification of construction and operation to comply with the Standards of Performance for New Stationary Sources, 40 CFR 60.7. State Crushing appears to be complying with this standard. Daily records of startup, shutdown, maintenance, downtimes, and emission control failures are maintained by plant operators. Attached is an example of these records (Attachment 6).

Section IX – S.C. 1: Requires State Crushing to label equipment using the company ID numbers in Appendix A of PTI 8-16. The equipment has the appropriate labels. I informed Ms. Robinson that the labeling will need to be modified upon installation of the new secondary crusher.

### **PTI No. 8-16 EUTRUCKTRAFFIC**

This emission unit consists of truck traffic used for the delivery of material product to customers; truck traffic from unloading area to crusher; loader traffic associated with process equipment, storage pile handling and loading delivery trucks. This applies to all commercial truck areas and unpaved road portions.

Fugitive dust from site grounds is minimized using the fugitive dust plan in Appendix B. This plan includes, among other things, requirements to keep the facility grounds wet at all times of operation, requirements to prevent dust/material from escaping during loading of vehicles, an onsite speed limit of 4 mph, and requires rumble strips at the exit of the facility.

Section I – S.C. 1: Limits visible emissions from EUTRUCKTRAFFIC to 5% opacity. I did not notice any opacity on the facility grounds; however, I did notice a significant amount of opacity just outside of the facility on Auburn Road. This does not appear to be a violation of permit conditions. The dust on Auburn Road appears to be caused not only by the activities at State Crushing, but also by multiple neighboring facilities.

Section III – S.C. 1: States that State Crushing shall not operate EUTRUCKTRAFFIC unless the fugitive dust control plan is implemented and maintained. State Crushing appeared to be operating in compliance with the fugitive dust plan outlined in Appendix B of PTI 8-16. The only issue from traffic that I noted was from drag-out. The rumble strips at the exit of the facility were partially filled with rocks and dust from vehicle tires. Kerry Kelly informed Mr.

Orozco that more frequent sweeping of the rumble strip area could help to minimize drag-out.

At the time of this inspection the rumble strip is the only control technology designed to minimize drag-out from the facility. It may be the case that the rumble strips do not do an adequate job of reducing drag-out. As of May 21, 2018, State Crushing has applied 3" crushed concrete to the entire facility grounds as a voluntary effort to alleviate the drag-out issue. If drag-out continues to be a problem, then it may be necessary to add additional control methods at the facility exit to Auburn Road.

State Crushing has applied for a PTI modification for the replacement of the secondary crusher. To help remedy the drag-out problem, MDEQ-AQD Staff requested to the permit writer that a condition be added to this PTI that requires longer, deeper ridged, rumble strips that are cleaned as needed or at least once per day. In the meantime, I informed Ms. Robinson that the rumble strip needs to be kept clean at all times to help mitigate drag-out.

Section III – S.C. 2: Requires a certified Method 9 Visible emissions reader be onsite at all times during the operation of EUTRUCKTRAFFIC. According to Ms. Robinson, the certified reader was taking the Method 9 certification test during my inspection. Ms. Robinson emailed me the certification on May 3, 2018 after this inspection. (Attachment 3)

Section V – S.C. 1: Requires that State Crushing conduct visible emissions testing of EUTRUCKTRAFFIC within 180 days of the issuance of this permit. This test was never completed. Periodic method 9 visible emission testing is currently not being performed for this process. Personnel at the facility were not aware that these visible emissions readings needed to be taken. I informed Ms. Robinson during a phone conversation on May 21, 2018, that these readings need to be taken from now on. Ms. Robinson agreed to begin taking these readings. See also discussion under compliance determination.

Section VI – S.C. 1: Requires that State Crushing perform six-minute visible emission readings of the truck traffic periodically. These readings have not been performed. I informed Ms. Robinson during a phone conversation on May 21, 2018, that these readings need to be taken from now on. Ms. Robinson agreed to begin taking these readings.

### **PTI No. 8-16 EUSTORAGE**

This emissions unit includes two product storage piles – a large diameter pile (approximately 3" chunks) and a small diameter pile (approximately 1" chunks). Uncrushed feed material is also included in this emission unit.

Emissions are controlled by minimizing the drop distance from conveyors to the stock pile and keeping the material piles sufficiently wet to prevent fugitive dust from exceeding 5% opacity.

Section I – S.C. 1: States that visible emissions from the storage piles shall not exceed 5% opacity. I did not notice any visible emissions from the storage piles during my inspection.

Section III – S.C. 1: States that State Crushing shall not operate the storage piles unless the fugitive dust plan specified in Appendix B of this permit is implemented and maintained. The facility appeared to be implementing the fugitive dust plan in accordance with permit requirements. The storage piles were properly wetted to prevent fugitive dust and the drop distances appeared to be minimized.

Section III – S.C. 2: Requires a certified Method 9 Visible emissions reader be onsite at all times during the operation of EUSTORAGE. According to Ms. Robinson, the certified reader was taking the Method 9 certification test during my inspection. Ms. Robinson emailed me the

certification on May 3, 2018 after this inspection. (Attachment 3)

Section V – S.C. 1: Requires that State Crushing conduct visible emissions testing of EUSTORAGE within 180 days of the issuance of this permit. This test was never completed. Personnel at the facility were not aware that this visible emissions reading needed to be taken. I informed Ms. Robinson during a phone conversation on May 21, 2018, that these readings need to be taken from now on. Ms. Robinson agreed to begin taking these readings. See also discussion under compliance determination.

Section VI – S.C. 1: Requires that State Crushing perform six-minute visible emission readings of the truck traffic periodically. Periodic Method 9 visible emissions testing is not currently being performed for this process. Personnel at the facility were not aware that these visible emissions readings needed to be taken. I informed Ms. Robinson during a phone conversation on May 21, 2018, that these readings need to be taken from now on. Ms. Robinson agreed to begin taking these readings.

### **Compliance Determination**

State Crushing has not been taking visible emission readings for EUTRUCKTRAFFIC and EUSTORAGE piles. Additionally, no initial visible emissions testing was performed for EUTRUCKTRAFFIC or EUSTORAGE. Initial visible emissions testing was only performed for EUPROCESS. This is a violation of permit conditions "EUTRUCKTRAFFIC Section V – S.C. 1", "EUTRUCKTRAFFIC Section VI – S.C. 1", "EUSTORAGE Section V – S.C. 1", and "EUSTORAGE Section VI – S.C. 1".

No visible emission readings have been taken for the current operating season (2018). Ms. Robinson believed that visible emission verification was not required until the facility reached maximum capacity for the operating season. I explained that the permit states the readings shall be taken "Once per calendar day during maximum routine operating conditions." I explained that "maximum routine operating conditions" means the maximum throughput conditions for the day the readings are taken. I explained that periodic readings are required even if the facility has not reached maximum capacity for the operating season. Failure to take periodic visible emission readings during operation of emission units is a violation of several permit conditions.

During the inspection State Crushing was in compliance with their opacity limits and following their fugitive dust control plan. Because of this AQD will use enforcement discretion and not issue a violation notice. Track-out/dust on Auburn Road remains a problem that is caused by this facility and also surrounding businesses. Another possible contributor to this track-out problem appears to be a Van-Horn concrete facility. See also discussion under EUTRUCKTRAFFIC Section III S.C. 1.

I discussed my intent to forego an official violation notice for the permit violations with MDEQ-AQD Southeast Michigan District Supervisor Joyce Zhu. We decided that in lieu of a violation notice, I will send State Crushing an email listing the violations noted during the inspection and request a written response from State Crushing that states how each violation will be remedied. This email was sent on Tuesday, June 12, 2018 (Attachment 5).

On Saturday, June 18, 2018, MDEQ-AQD received an official response from State Crushing that addresses each permit violation noted during this inspection and specifies an appropriate corrective action for each violation. This response was sent per the request of MDEQ-AQD. The response is attached to this report (Attachment 5). I informed Ms. Robinson that I will periodically request visible emission records throughout the 2018 operating season to confirm

that these violations have been properly addressed. I informed Ms. Robinson on June 6, 2018, that initial testing of visible emissions for EUTRUCKTRAFFIC and EUSTORAGE needs to be completed by the end of July 2018.

NAME Adam BagnerDATE 7/9/2018SUPERVISOR SK