

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

N317149894

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: 07/24/2019
STAFF: Adam Bogнар	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On Wednesday July 24, 2019, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, I, Adam Bogнар, 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 Environment, Great Lakes, and Energy, Air Quality Division (EGLE-AQD) rules; Permit to Install No. 8-16A; and 40 CFR Part 60 Subpart 000 – Standards of Performance for Nonmetallic Mineral Processing Plants (NSPS 000).

I arrived at State Crushing (the "facility") at around 1:30 pm and met with Ms. Jody Robinson, Controller. I identified myself and stated the purpose of the inspection.

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.

Consent Order

State Crushing was issued a consent order in 2016 (No. 38-2016) for operating the crushing process without obtaining a permit to install and for operating out of compliance with NSPS 000. This consent order is still active. In March 2019 State Crushing requested to terminate the consent order. Although no violation notices have been issued since the consent order was issued, the AQD has noted non-compliance issues and, at AQD discretion, did not issue an official violation notice. AQD staff talked to Mr. RJ Orozco, Owner and explained that if there are still issues after the consent order is terminated, then AQD can reopen another consent order and assess another penalty fee. State Crushing agreed to leave the current consent order active until the end of the operating season in 2019.

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. There are two types of stone produced in this process – 1"-3" stone and the smaller/finer "21AA" stone.

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 recently replaced their secondary crusher with a new crushing unit. The facility modified their permit to install to reflect this change.

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 observed that the drop point after the newly installed secondary crusher was emitting a relatively small amount dust, but significantly more dust than all other drop points. The dust appeared to be around 10% opacity. I did not perform a Method 9 visible emissions test at this time.

I brought this issue up with Ms. Robinson and the crusher foreman. I informed them that the opacity may be exceeding visible emission limits. Ms. Robinson and the crusher foreman agreed to try to remedy this issue. The crusher foreman turned the spray water up in the secondary crusher and said he would look into other possible solutions. I asked them to send me a picture of the solution they decide to implement. I informed Ms. Robinson that if nothing is done to remedy this issue by the end of August 2019, then I may return to State Crushing to perform a Method 9 visible emissions test on the 2nd crusher drop point.

UPDATE: August 8, 2019 – Ms. Robinson informed me that State Crushing has installed a rubber enclosure to surround the drop point of the second crusher. Ms. Robinson stated that the enclosure is working well. See attachment for photo of enclosure.

At all other material transfer points the crushed material appeared to be adequately wetted to minimize dust.

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 April 2019 (when this seasons crushing began) to July 1 2019 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 (see attached).

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. Other than the issue with the secondary crusher noted above, I did not notice any opacity from the crushing process.

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 any significant amount of dust coming from the crushing process, plant yard, or storage piles.

The track-out issue noted during my last inspection appears to have been greatly improved. I noticed very little track out on Auburn Road. When I arrived at the facility, I observed a street sweeper was finishing up and leaving. Ms. Robinson stated that the street sweepers come daily. The street sweepers clean out the rumble strips and remove any track-out from Auburn Road. 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.

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. In my previous inspection in May 2018, I noted that visible emission readings were not performed according to NSPS OOO and PTI No. 8-16. Based on the records I reviewed during this inspection, visible emission readings are now performed and records of these readings are kept.

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. Based on the records I reviewed these records are maintained. These records also indicate when the water truck wets the yard.

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. The water sprays appeared to be functioning correctly during my inspection.

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. Facility notified the AQD of an official EPA Method 9 visible emissions test for the new crusher

and all other equipment at the facility. This test was performed on August 14, 2018.

Section V – S.C. 2: Requires visible emissions testing to be performed on EUPROCESS within 180 days of permit issuance. This test was performed on August 14, 2018. The results of this testing did not indicate any visible emissions exceedances.

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. 2: Requires State Crushing to keep daily, monthly, and 12-month rolling records of the amount of material processed through EUPROCESS. These records are maintained.

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 month. Based on the records I reviewed, these readings are taken each month.

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. Based on the records I reviewed these inspections are performed daily. Crusher operators fill out a checklist each day that includes the operator name, condition of the water sprayers, and a space to identify any other malfunctions.

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 these records for the 2019 operating season. State Crushing appears to be properly maintaining the water spray dust control system.

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.

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.

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.

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 8-16A. The rumble strips at the exit of the facility were clean during my inspection. Facility grounds appeared to have been recently wetted.

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. This combined with an increased frequency of the street sweeper appears to have improved the drag-out issue on Auburn Road.

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 performed on August 14, 2018. The results of this testing did not indicate any visible emissions exceedances.

Section VI – S.C. 1: Requires that State Crushing perform six-minute visible emission readings of the truck traffic once per calendar month. Based on the records I reviewed these readings have been performed.

PTI No. 8-16 EUSTORAGE

This emissions unit includes two product storage piles – a large diameter pile (approximately 1-3" chunks) and a smaller diameter pile (21AA). Uncrushed feed material is also included in this emission unit.

Emissions are controlled by minimizing the drop distance from conveyors to the storage piles 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 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 performed on August 14, 2018. The results of this testing did not indicate any visible emissions exceedances.

Section VI – S.C. 1: Requires that State Crushing perform six-minute visible emission readings of the truck traffic monthly. Based on the records I reviewed, these readings are taken each month.

Compliance Determination

Observations made during my inspection and record review indicate that State Crushing is operating in compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) Administrative Rules; Permit to Install No 8-16A; and 40 CFR Part 60 Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants (NSPS OOO).

The issues with visible emission readings noted during my last inspection appear to have been remedied. State Crushing has been taking monthly visible emissions readings of the crushing process, truck traffic, and storage piles.

NAME Adam Bagner DATE 8/14/2019 SUPERVISOR SK