

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

B546559476

FACILITY: DRAYTON IRON AND METAL CO		SRN / ID: B5465
LOCATION: 5229 WILLIAMS LAKE RD, DRAYTON PLNS		DISTRICT: Warren
CITY: DRAYTON PLNS		COUNTY: OAKLAND
CONTACT: Tom J. Spurgeon , Administrative Director		ACTIVITY DATE: 07/30/2021
STAFF: Adam Bognar	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On July 30, 2021, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, I, Adam Bognar conducted a scheduled inspection of Drayton Iron & Metal (the “facility”) located at 141 East Montcalm, Pontiac 48342. 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; 40 CFR Part 60 – Standards of Performance for Nonmetallic Mineral Processing Plants (Subpart OOO); and Permit to Install No. 398-75A.

I arrived at Drayton Iron & Metal at around 10 am. I met with Mr. Larry Throesch, Manager. I identified myself and stated the purpose of the inspection. Mr. Throesch gave me a tour of the facility.

Drayton Iron & Metal operates a metal scrapyard and a concrete crusher at this location. At the metal scrapyard, the facility receives metal pieces from various sources, sorts them, cut/sheer/torches to reduce size, then ships them to a foundry that takes recycled metal. Additionally, the facility receives concrete chunks from various demolition/construction projects. These chunks are fed to a concrete crusher that reduces the size of the chunks to uniform size (approximately 4 inch and 1 inch diameter chunks).

In a previous inspection of this facility, I observed torch cutting being performed outdoors. Since the torch cutting is/was performed outdoors with no emission control, torch cutting at Drayton Iron & Metal is not exempt from the AQD Rule 201 requirement to obtain a permit to install. Torch cutting at Drayton Iron & Metal is currently unpermitted. A violation notice was sent to Drayton Iron & Metal on June 19, 2019 seeking compliance with Rule 201.

Rather than apply for a permit to install, Drayton Iron & Metal decided to construct an enclosure/filtration system to capture torch cutting emissions. Torch cutting is exempt from the requirement to obtain a permit to install if it does not adversely affect the surrounding area and has emissions that are released only into the general in-plant environment and/or that have externally vented emissions equipped with an appropriately designed and operated enclosure and fabric filter.

Mr. Throesch showed me the torch cutting enclosure. The enclosure is a three-sided structure built from shipping containers (“Connex boxes”). The walls are each two containers tall. A heavy-duty tarp is draped over the top of the structure to create a roof. There are several fan inlets located in the back wall of the structure which are designed to draw air from the torch cutting and push it through a filter system. These inlet fans are located 15 feet higher than the actual torch cutting. The filter system is constructed from an industrial air conditioning unit with additional

filters stuck inside it. The air conditioning unit also has fans that pull air through the fabric filters. Torch cutting is conducted within this enclosure. The enclosure is relatively large since this facility needs to be able to torch cut large materials such as “I” beams.

Staff at Drayton Iron & Metal demonstrated torch cutting in this enclosure during a previous inspection on August 26, 2020. After this demonstration, I informed Mr. Throesch that the enclosure is not adequately capturing the torch cutting emissions. I told Mr. Throesch that I have never seen a dust collector system equipped with fans instead of blowers. Fans are generally not designed to blow against resistance, such as a filter. I also questioned whether the fans would ever be powerful enough to draw torch cutting emissions 10-15 feet upwards.

Mr. Throesch said he would attempt to improve the structure. He procured a powerful blower to replace the fans in the enclosure; however, the blower proved to be too powerful. The amount of suction created by the new blower nearly blew the doors off the enclosure.

Mr. Throesch purchased an additional shear for the facility to further reduce the need for torch cutting. The new shear will attach to a backhoe. The other shear, used for smaller items, is located inside the Quonset hut. No emissions are expected from the shearing process.

Mr. Throesch stated that Drayton Iron & Metal is not currently torch cutting any materials. All materials are either sheered or broken apart with a large wrecking ball. Mr. Throesch stated that he will not torch cut any materials unless the fabric filter/enclosure system is functioning properly.

Permit to Operate No. 398-75

PTI No. 398-75 was issued in 1988 for a jaw crusher, conveyor belt, screens, and magnetic separators. The original crushing plant was designed to process foundry slag which contained a high amount of iron. Currently this equipment is still operated, but it is now only used as a concrete crusher – no foundry slag is processed. Because this feedstock has changed, I requested that Drayton Iron & Metal update their permit to install. PTI No. 398-75A was issued to this facility on March 3, 2021.

EUPROCESS

This emission unit consists of crushing process equipment including screens, crushers, feeders, conveyers, ect. Emissions from crushing and drop points are controlled using water sprays.

Section I – SC 1: Limits opacity from drop points and transfer points to a six minute average of 10%. I did not observe any opacity from EUPROCESS during this inspection. I observed that the crusher was operating and the water sprays running.

Section II – SC 1: States that the permittee shall not process any asbestos tailing or waste materials containing asbestos in EUPROCESS. Mr. Throesch stated that no asbestos materials are processed. Only concrete material is crushed. Occasionally, a piece of metal or debris makes it into the crusher, but Drayton Iron & Metal does their best to remove any metal/scrap from the concrete prior to crushing. Customers do not want metal in their gravel.

Section II – SC 2: States that the permittee shall not process more than 25,000 tons of material through EUPROCESS per 12-month rolling time period. This facility began operating the crusher under this new permit on June 24th, 2021. Mr. Throesch provided me with records of the amount of

material crushed since the new permit was issued. 1,205 tons of concrete was crushed in June 2021. 2,885 tons of concrete were crushed in July 2021. The facility appears to comply with this throughput limit.

Section III – SC 1: States that the permittee shall not operate any portion of EUPROCESS unless each portion of EUPROCESS meets the specific opacity limit from Appendix A of this permit. I did not notice any opacity from EUPROCESS during this inspection.

Section III – SC 2: States that the permittee shall not operate EUPROCESS unless the fugitive dust plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B of this permit has been implemented and maintained. Based on my observations during this inspection, the fugitive dust plan is adhered to. I did not notice any opacity from the truck traffic, storage piles, or crushing process. There was not significant track-out onto the road outside the facility exit.

Section III – SC 3: States that the permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and OOO (NSPS OOO), as they apply to EUPROCESS. Drayton Iron & Metal must perform Method 9 visible emission readings on EUPROCESS in accordance with NSPS OOO. I explained this to Mr. Throesh and in an email to the facility. Compliance with the performance testing requirements of NSPS OOO will be determined after the initial performance test.

Section IV – SC 1: States that the permittee shall not operate any portion of EUPROCESS unless the equipment's specified control device is installed, maintained, and operated in a satisfactory manner as listed in Appendix A. I observed that the water spray control technology was functioning during my inspection. There is a water spray before and after the crushing process. The water sprays appeared to adequately cover the concrete material such that no opacity was observed.

Section IV – SC 2: States that the permittee shall install and maintain a scale on the loader that feeds the crusher which continuously shows the daily throughput rate for the conveyor. There is no scale on the loader at this facility. Drayton Iron & Metal has a scale installed at the entrance of their facility. To weigh the raw materials, the loader driver weighs the empty loader, picks up a load of raw concrete, then re-weighs the loader. The difference between these two weights is the throughput of the crusher. This appears to be an acceptable way for materials to be weighed at this facility although it differs from permit language slightly.

Section V – SC 1: Requires the permittee to evaluate visible emissions from EUPROCESS within 180 days of commencing trial operation. Trial operation commenced on June 24, 2021. I explained to Drayton Iron & Metal that they will need to have a staff member get a Method 9 certification. I also explained that they should try and do the visible emissions test before the end of the 2021 crushing season (ends after freezing temperatures). If they are not able to do a visible emissions test during the 2021 crushing season, then they may miss their 180 window to test. I emailed the facility links to the two Method 9 certification businesses that I am aware of (Aeromet and Eastern Technical Associates).

Section VI – SC 1,2: Specifies recordkeeping requirements for this facility. The facility is required to keep daily and monthly records of the amount of material processed through EUPROCESS. This data must be used to calculate an annual throughput rate based on a 12-month rolling time period.

These records are maintained. Drayton Iron & Metal provided me with daily and monthly throughput records for June and July. Also included on this record sheet is the amount of raw materials brought on site and each time water/dust suppressant is applied to the plant grounds/piles. These records can be found on the AQD shared drive at the following address: S:\Air Quality Division\STAFF\Bognar, Adam\Inspection Documents\Drayton Iron & Metal.

Section VII – SC 1,2: Specifies reporting requirements. Drayton Iron & Metal must notify the AQD within 30 days after the installation of this crusher. This requirement does not apply to this facility because they have operated the same crusher at this site since 1988. The only modification since then has been a change in feed stock that happened in the 1990's.

Section IX – SC 1: States that within 45 days of this permit, the permittee shall label all equipment using the company ID numbers in Appendix A. I verified that the equipment at this facility is labeled appropriately. The facility notified AQD that this equipment was labeled on June 25, 2021.

EUTRUCKTRAFFIC

Section I – SC 1: Limits opacity from EUTRUCKTRAFFIC to 5%. Compliance with this limit must be demonstrated using Test Method 9D. I did not notice any opacity from the truck traffic on-site during this inspection. I explained to Drayton Iron & Metal that they need a staff to get Method 9 certified in order to comply with their new testing requirements.

Section III – SC 1: States that the permittee shall not operate EUTRUCKTRAFFIC unless the fugitive dust control plan is implemented and maintained. Based on my observations during this inspection, the fugitive dust control plan has been implemented correctly. The grounds were wet when I arrived and I observed a water truck on site. Additionally, the facility recently purchased a fire truck to replace their deteriorating water truck. The facility provided pictures of this fire truck; however, it was not on-site during this inspection.

EUSTORAGE

Section I – SC 1: Limits opacity from EUSTORAGE to 5%. Compliance with this limit must be demonstrated using Test Method 9D. I did not notice any opacity from the storage piles during this inspection. The crushing process was operating and gravel was falling onto the storage piles. Mr. Throesh stated that the storage piles usually only cause dust after a few days without rain. It had rained the day before this site visit. The piles are wetted as needed according to the fugitive dust plan.

Section III – SC 1: States that the permittee shall not operate EUSTORAGE unless the fugitive dust control plan is implemented and maintained. Based on my observations during this inspection, the fugitive dust control plan has been implemented correctly. The drop distance between the conveyor belt exit and the gravel pile is minimized as much as possible. The equipment is not designed to go any lower than it's current setup. The piles were not recently wetted during my inspection, but I did not observe any opacity while the crusher operated.

I left the facility at around 11:30 am

Compliance Determination

Observations made during this investigation indicate that Drayton Iron & Metal 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); EGLE-

AQD Administrative Rules; 40 CFR Part 60 – Standards of Performance for Nonmetallic Mineral Processing Plants (Subpart OOO); and Permit to Install No. 398-75A.

The violation notice dated September 22, 2020 will be resolved as a result of this inspection.

Drayton Iron & Metal applied for and received a permit to install for the crushing equipment. The facility has 180 days from June 23, 2021 to conduct a performance test pursuant to NSPS OOO and PTI No. 398-75A. I explained this to Drayton Iron & Metal via email.

The violation notice dated June 19, 2019 will be resolved as a result of this inspection. Instead of torch cutting, Drayton Iron & Metal has purchased a shear and a wrecking ball to break up scrap. Both of these devices are operated by backhoes. Mr. Throesh stated that the facility will not torch cut scrap unless their torch cutting emissions capture enclosure is operating correctly.

NAME Adam Bogros

DATE 8/24/2021

SUPERVISOR K. Kelly