DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: On-site Inspection

P115564016

FACILITY: Iron City Enterprises		SRN / ID: P1155
LOCATION: N2404 HWY 41, MENOMINEE		DISTRICT: Marquette
CITY: MENOMINEE		COUNTY: MENOMINEE
CONTACT: Josh Nemetz , Manager		ACTIVITY DATE: 08/04/2022
STAFF: Lauren Luce	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Targeted Inspection FY22		
RESOLVED COMPLAINTS:		

Facility: Iron City Enterprises

Location: Wildwood Rd., Menominee, MI

Contact: Josh Nemetz, Manager, 715-923-2211

Regulatory Authority

Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.

Facility Description

Iron City Enterprises (ICE) is a construction company based out of Menominee, MI. The company provides services in the septic tank, concrete, and aggregate industries. For aggregate, ICE operates a portable nonmetallic crusher plant throughout the Upper Peninsula.

Process Description

A crushing plant produces smaller size aggregate from larger size rock. The final product can be used for a variety of applications from infrastructure projects to residential landscape purposes. A crushing plant can consist of loaders, haul trucks, generators, crushers, screens, conveyors, and stockpiles. The plant is normally located within a quarry, crushing stone that was generated from blasting. The process begins with large size rocks being fed into the primary crusher via loader, producing an initial size product. From the primary crusher, the product can be conveyed into a screen plant that separates the crushed aggregate into various sized products. Smaller size material is filtered out and leaves on separate conveyors to stockpiles, while larger size material continues into the secondary crusher. A secondary crusher will break the aggregate down into smaller sizes before it enters the screen plant again or continues down the line to a tertiary screen and crusher. A crushing plant may have several crushers, screens, and conveyors depending on how many sizes of aggregate are to be produced.

Emissions

Stone crushing and processing operations can cause point and fugitive emissions of PM, PM10, and PM2.5. Emissions from process operations should be considered fugitive unless the source of emissions is vented through a force-air vent or stack. Fugitive sources of emissions are generated

from machine movement and wind erosion. Emission sources can include hauling, crushing, screening, and transferring of material. The primary factors affecting PM emissions are wind and moisture content of the material. Spray bars on crushers and screens, along with the use of dust suppressants on roadways reduces fugitive dust emissions from activity by 60% to 85%. Moisture on the surface of the material can cause fine particles to adhere resulting in a dust suppression effect.

Emissions Reporting

The facility is subject to the federal New Source Performance Standards (NSPS) Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants and is required to report its annual emissions to Michigan Air Emissions Reporting System (MAERS). The following table lists the source total emissions for the reporting year 2021.

Pollutant	Emissions (PPY)
PM 10 FLTRBL	1318.28

Compliance History

The facility was last inspected on 05/19/2021 and found to be in compliance with Michigan Air Pollution Control Rules and federal regulations. The source was issued a violation notice on 08/21/2020 for not having a permit for the portable crushing plant and not being in compliance with 40 CFR Part 60 Subpart OOO. An administrative content order (ACO) was issued in July 2021.

Regulatory Analysis

ICE is subject to Permit to Install (PTI) No. 181-20A for a portable non-metallic crushing plant. The facility is considered a true minor source because the potential-to-emit (PTE) of all regulated air pollutants is less than the major source thresholds. The facility is also considered an area source because the PTE of individual HAPs is less than 9 tpy and the PTE of aggregate HAP emissions is less than 25 tpy. The facility is subject to NSPS Subpart OOO by having a portable crushing plant with a crushing capacity of greater than 150 tons/hr and equipment that has been constructed after August 31, 1983. The facility is also subject to ACO AQD No. 2021-12.

<u>Inspection</u>

On August 4, 2022, AQD Staff (Lauren Luce) conducted a targeted inspection on Iron City Enterprises at the Wildwood Pit in Menominee, MI. The pit is located north of the City of Menominee on Wildwood Rd. in Menominee County. AQD Staff arrived at the facility and met with Josh Nemetz, Manager of ICE. It was explained that the purpose of the inspection was to ensure compliance with PTI No. 181-20A, ACO AQD No. 2021-12, and all other state air pollution control rules and federal regulations. The inspection began by checking for visible emissions.

Operations, on-site equipment, and records were then discussed, and a walkthrough of the process and equipment was provided.

Process equipment was inspected for labels and water sprays where required. Water sprays were observed on required equipment. The table below lists the equipment that was observed on-site and labeled. Visible emission test records were provided via email following the inspection for each piece of crushing equipment on-site. All equipment passed the tests for their opacity limits.

Equipment	Label	VE Tested
Screen	114	9/14/21
Jaw Crusher	103	9/14/21
Conveyor	15	9/14/21
Second Finish Jaw Crusher	104	9/14/21
Conveyor	5	9/14/21
Roll Crusher	105	9/14/21

The plant was operating at the time of arrival. The equipment stopped operating during the inspection to switch material. The drop heights from conveyors to transfer points were kept low to minimize dust. No visible emissions were observed from the storage piles. The plant roadways appeared well saturated. No exceedances of visible emissions were observed from any equipment. Additional equipment on-site included a diesel engine for power generation, water pumps, and front-end loaders.

The facility is keeping track of the amount of material crushed on a daily basis and if water was used to control fugitive dust. Total throughput for 2021 was 131,828 tons. The twelve-month rolling average in June 2022 was 11,196.07 tons. No asbestos tailings or asbestos-containing waste materials are processed through the plant. Per the ACO, the facility is required to submit 4 quarterly reports containing the monitoring and recordkeeping requirements as described in Section IV FGCRUSHING in PTI No. 18-20A. Though the facility has been tracking all of the required information, they have not submitted quarterly reports. This was discussed at the inspection and on a follow-up phone call. The facility stated they were unaware of the quarterly report requirement and provided the backdated reports upon request.

The facility has submitted a EQP5757 form for relocation notices.

Compliance

Based on this inspection, it appears Iron City Enterprises is in compliance with PTI No. 181-20A and all other state air pollution control rules and federal regulations. However, at the time of the inspection ICE was not in compliance with the ACO. It was conveyed to the facility that no violations were observed during the inspection but that the quarterly reports had not been submitted and further conversations would need to take place regarding them.



Image 1: Second Finish Jaw Crusher and Roll Crusher



Image 2: Conveyor and Jaw Crusher

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DATE 08/12/2022 SUPERVISOR /

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