

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

P143974802

FACILITY: Smith Constructions, Inc.		SRN / ID: P1439
LOCATION: 505 Kalkaska Drive, NEGAUNEE		DISTRICT: Marquette
CITY: NEGAUNEE		COUNTY: MARQUETTE
CONTACT: Wyatt Smith , Crushing Superintendent		ACTIVITY DATE: 11/07/2024
STAFF: Joe Scanlan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced inspection to determine compliance with PTI No. 26-24		
RESOLVED COMPLAINTS:		

REGULATORY AUTHORITY

Under the Authority of Section 5526 of Part 55 of NREPA, The Department of Environment, Great Lakes, and Energy (EGLE) 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

Smith Paving Inc. is a general construction company that provides excavation, demolition, trucking, commercial paving, storm sewer and water supply services, aggregate, soil, sand, and material delivery services. The company is based out of Marquette Township, in Marquette County, with the main office and equipment yard located in a commercial district off of US-41.

The company also owns two gravel pits, the entrance to the main pit is Kalkaska Drive, located off US-41 in Negaunee Township approximately two miles west of the office, and the other pit is located approximately two miles north of the city of Marquette on County Road 550. The company was issued a General Permit to Install (PTI No. 26-24) for a portable nonmetallic mineral crushing facility on 3/05/2024.

PROCESS DESCRIPTION

A crushing plant produces smaller size aggregate from larger size rock. A crushing plant may consist of loaders, haul trucks, generators, crushers, screens, conveyors, and stockpiles. The plant is normally located within a quarry and crushes stone generated from blasting. The final product may be used for a variety of applications, including infrastructure projects and landscaping.

The process begins with raw material being fed into a primary crusher via loader, producing an initial size product. From the primary crusher, the product is conveyed into a screen plant that separates the crushed aggregate into various sized products. Smaller material is filtered out and leaves on separate conveyors to stockpiles, while larger material is transported to a secondary crusher. The secondary crusher will break the aggregate down to a smaller size aggregate before it enters the screen plant again or continues 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 annual emissions to MiEnviro each year. Because this facility was permitted this year, 2024 will be the first year of reporting annual emissions to MiEnviro.

COMPLIANCE HISTORY

The facility has not received any violation notices and has not previously been inspected.

INSPECTION

On 11/07/2024, AQD staff (Joseph Scanlan) conducted a targeted inspection of Smith Construction Inc. nonmetallic mineral crushing facility located at the Kalkaska Drive pit in Neguinee Township, MI. The purpose of the inspection was to ensure compliance with PTI No. 26-24 and all other applicable air pollution control rules and federal regulations. AQD staff arrived onsite and met company owner Andy Smith and crusher superintendent Wyatt Smith at the pit. The crushing facility was not operating at the time of inspection.

AQD staff observed that all permitted equipment was present onsite. The crusher is a rented 2021 Sandvik jaw crusher (model QJ341) with a maximum rate capacity of 440 tons per hour (tph). In conjunction with the jaw, the company also utilizes a rented 2021 Sandvik scalper heavy duty 2 deck screen (model QE342) with a maximum rated capacity of 551 tph. Additionally, there is a 2023 Edge TS8040 Stacker for conveying materials. The emission units are labeled with designated device ID numbers as indicated on the facility's process information form. All of these units are rented from Miller-Bradford & Risberg, Inc.

During the inspection, the facility appeared to be following all requirements of its fugitive dust plan. All three permitted emission units are equipped with water spray to control fugitive dust. Water is sourced from a pond located in the pit, with an underground line leading from the pond into the quarry. A water truck is used to apply water to areas in the pit and on haul roads as necessary. At the time of inspection, the roadways throughout the pit and yard were quite saturated with water and muddy in spots due to recent rain. No visible emissions were observed while on-site.

AQD staff requested records for material processing tonnage and dust suppressant application records for 2024 and for Method 9 visible emissions testing to be scheduled for the crusher plant. Records provided show that the facility produced approximately 61,000 tons of material in 2024 to date, well below the facility's limit of 2,000,000 tpy. Method 9 visible emissions testing on all applicable equipment was conducted 8/26/2024 Dan Soley of Miller-Bradford & Risberg.

COMPLIANCE

Based on this inspection and the records reviewed, Smith Construction Inc. appears to be in compliance with PTI No. 26-24 and all other applicable air pollution control rules and federal regulations.

NAME 

DATE 12-3-2024

SUPERVISOR 