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

P127166384

FACILITY: US ARMY CORPS OF ENGINEERS		**SRN / ID:** P1271
LOCATION: 477 MICHIGAN AVE, DETROIT		**DISTRICT:** Marquette
CITY: DETROIT		**COUNTY:** WAYNE
CONTACT: Justin Proulx ,		**ACTIVITY DATE:** 02/17/2023
STAFF: Lauren Luce	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Targeted Inspection FY23		
RESOLVED COMPLAINTS:		

Facility: U.S. Army Corp of Engineers (SRN: P1271)

Location: Neebish Island, Chippewa County, MI

Contact: Hal Harrington, Justin Proulx

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

The U.S. Army Corp of Engineers rented a portable crusher to crush rock located on Neebish Island in Chippewa County, MI.

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 is a new facility and has not yet reported to MAERS.

Compliance History

The facility has not been inspected previously.

Regulatory Analysis

U.S. Army Corps of Engineers is subject to General Permit to Install (PTI) No. 49-22 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 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.

Inspection

On February 17, 2022, AQD Staff (Lauren Luce) conducted a records review/off-site inspection of U.S. Army Corps of Engineers portable crushing plant. Records were requested on total crushing tonnage and visible emissions testing. A total of 161,710 tons was processed through the plant in 2022. Visible emission test records were provided via email for each piece of crushing equipment on-site. All equipment passed the tests for their opacity limits.

The U.S. Army Corps of Engineers rented the portable crushing plant to complete a project in 2022. The crushing plant was returned in 2022 after the project was completed. On February 14, 2022, the U.S. Army Corps of Engineers requested that PTI No. 49-22 be voided as the project is complete as no further crushing is planned.

Compliance

Based on this off-site inspection, it appears U.S. Army Corp of Engineers operated in compliance with PTI No. 49-22 and all other state air pollution control rules and federal regulations.

NAME _____ DATE 02-17-2023 SUPERVISOR _____