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

P118363109

FACILITY: ZEELALND BPW		SRN / ID: P1183
LOCATION: 495 W WASHINGTON AVENUE, ZEELAND		DISTRICT: Grand Rapids
CITY: ZEELAND		COUNTY: OTTAWA
CONTACT: Robert Mulder, Electric Power Supply& Market Operations Manager		ACTIVITY DATE: 05/10/2022
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: The purpose of this inspection was to determine compliance with Permit to Install (PTI) No. 40-21.		
RESOLVED COMPLAINTS:		

On Tuesday May 10, 2022, Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) Staff Kaitlyn DeVries (KD) conducted a scheduled inspection of Zeeland Board of Public Works – West. Washington location, located at 495 West Washington, Zeeland, MI. The purpose of this inspection was to determine compliance with Permit to Install (PTI) No. 40-21.

KD met with Mr. Bob Mulder, Electric Power Supply & Market Operations Manager, at Zeeland Board of Public Works (ZBPW) main facility at 350 East. Washington prior to going to the West Washington Location. Upon arrival at the West Washington location, KD observed the area for any odors or opacity; none were noted.

Facility Description

The West Washington location consists of two (2) 1,462 bhp non-emergency natural gas fired lean burn Caterpillar engines. Each of the engines has an oxidation catalyst to control Carbon Monoxide (CO) and Volatile Organic Compound (VOC) emissions. These engines had previously been operating under a Rule 201 permitting exemption as emergency engines, but ZBPW requested to permit these engines and make them non-emergency engines. These units were not in operation at the time of the inspection.

Regulatory Analysis

ZBPW – West Washington is a minor source of air pollutants and operates under PTI No. 40-21. The engines are also subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines (RICE), as an Area Source. These engines are not considered to be limited use or emergency engines under this regulation.

Compliance Analysis

The two (2) engines combined have a nitrogen oxides (NOx) emission limit of 35.5 tons per year (tpy), based upon a 12-month rolling time period. As of April 2022, the 12-month rolling NOx emissions were 0.73 tons. Verification of the NOx emission from these engines is required upon the request of the AQD, for which the AQD is not requesting additional testing at this time. Testing is required by the NESHAP for Carbon Monoxide (CO) to verify CO reduction. ZBPW has conducted performance testing previously, and Per Mr. Mulder conducts it annually to ensure the reduction efficiency.

Each engine is limited to 5,500 hours of operation per year, based upon a 12-month rolling time period. Each engine is equipped with an hour meter to track operation, and per the records each engine has run for 77 hours during the time period of May 2021 – April 2022. ZBPW is required to implement and maintain a malfunction abatement plan. The malfunction abatement plan (MAP) was due within 90 days of permit issuance. While the MAP was not submitted within 90 days of permit issuance, it has now been submitted.

Stack dimensions, while not explicitly measured, appeared to be correct.

Compliance Determination

Based upon the observations made during the inspection and a subsequent review of the records the Zeeland Board of Public Works - West Washington Location is in compliance with PTI No. 40-21.

NAME Kaulynstahin

DATE 4/4/2022 SUPERVISOR