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

P082971598

FACILITY: Sebewaing Light and Water Dept.		SRN / ID: P0829
LOCATION: 120 West Main Street, SEBEWAING		DISTRICT: Bay City
CITY: SEBEWAING		COUNTY: HURON
CONTACT: Charlene Hudson , Superintendent		ACTIVITY DATE: 04/17/2024
STAFF: Dillon King	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Dillon King (DK) and Adam Shaffer (AS) arrived at the Sebewaing Light and Water (SLW) facility, SRN: P0829 at 12:10 pm on April 16, 2024 to complete a scheduled inspection.

Upon entering the facility, DK and AS met with Ms. Charlene Hudson, Superintendent, Mr. Pete Smith, Operations, and Mr. Nicholas Hansen, Consultant. Pete Smith and Nicholas Hansen escorted AQD staff through the facility and provided site information, and Ms. Charlene Hudson provided records. The facility was not operating at the time of the inspection.

Facility Description

SLW is an electrical generating station consisting of six emergency engines. Five of the engines are dual fuel capable and one is diesel-fired. The engines are placed into service as-needed based upon electricity demands of the grid. The facility operates under opt-out Permit-to-Install (PTI) No. 164-17A. The permit contains facility wide conditions as well as conditions for EUENGINE5. The facility wide opt-out limit prevents the potential to emit from exceeding Title V thresholds in the event that SLW re-classifies the engines as non-emergency (operating over 500 hours a year). The other five engines are considered "grand fathered" as they were installed prior to August 1967 and have not been modified or reconstructed. SLW indicated that no major maintenance events have occurred since the last inspection but the engine designated "Unit 2" had a failure and will likely be taken out of service.

Compliance Evaluation

EUENGINE5

This emission unit is a Fairbanks-Morse model 38 DD 8 1/8 dual fuel-fired engine installed in 1979. The engine has a net output rating of 1,136 kilowatts (kW). The engine does not have emission limits but does have material and operational limits. The engine is limited to burn only No. 2 fuel oil with the maximum sulfur content of 15 ppm by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. The most recent certificate for analysis (COA) dated March 18, 2018 indicated a sulfur content of 9 ppm, a cetane index of 41 and an aromaticity of 43. The facility is also limited to operating EUENGINE for no more than 500 hours per year. According to records received the engine has operated for a total of 12.9 hours since January of 2022 and hasn't operated since April of 2023.

During the walkthrough of the facility, AQD staff observed that all engines had a non-resettable hour meter installed. For EUENGINE5, the meter indicated a total operating time of 214.1 hours. AQD staff also observed the catalyst housing and stack associated with EUENGINE5. The equipment appeared well maintained and though not directly measured, the stack appeared to meet the requirements in PTI No. 164-17A.

FGFACILITY

The FGFACILITY flexible group conditions apply to all equipment at the facility. The conditions limit NOx emissions to less than 89.8 tons per year and total fuel burnt to less than 44,000 MMBtu per year. Both of these limits are based on a 12-month rolling time period as determined at the end of each calendar month and require record keeping. The highest 12-month rolling average NOx emissions was 2.6 tons from December of 2022. The highest single month NOx emissions reported was 1,769 pounds in June of 2022. The highest 12-month rolling average combined fuel usage

was 1,405 MMBtu from December of 2022. The highest single month combined fuel usage reported was 552 MMBtu in June of 2022. Based on the records provided the facility is well below the limits in FGFACILITY.

During the walkthrough, AQD staff observed a parts washer that appeared to not be in use. The parts washer is likely exempt from Rule 201 permitting via Rule 281(2)(h) as the air/vapor interface appears less than 10 square feet.

Conclusion

Based on the review of the records provided and the observations made at the time of the inspection, SLW appears to be in compliance with PTI No. 164-17A and any other applicable air quality rules and regulations.

DATE 04/17/24 SUPERVISOR