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

D200214030		
FACILITY: DTE Electric Company - Oliver Peaking Facility		SRN / ID: B2802
LOCATION: 346 GAGETOWN ROAD, OLIVER TWP		DISTRICT: Bay City
CITY: OLIVER TWP		COUNTY: HURON
CONTACT: Zack Josefiak , Environmental Engineer		ACTIVITY DATE: 11/21/2024
STAFF: Haley Willman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: On-site inspection to verify compliance with MI-ROP-B2802-2023		
RESOLVED COMPLAINTS:		

<u>Summary</u>

A scheduled inspection was completed by Air Quality Division (AQD) staff Haley Willman (HW) and Emily Crimmins at DTE Oliver Peaking Station in Oliver Township, Michigan to verify compliance with Renewable Operating Permit (ROP) No. MI-ROP-B2802-2023. The facility is used for energy production during periods of elevated demand in the local grid. The site consists of five diesel fired engines, each with an oxidation catalyst. Based on the observations from both the offsite records review and onsite observations and discussions with staff, DTE Oliver Peaking Station appears to be in compliance.

Compliance Evaluation

At the time of inspection, there were no open violation notices, enforcement actions, or complaints for this site. A request was sent to Zack Josefiak (ZJ), environmental engineer, on November 14, 2024, for records required by their ROP. The following records were requested:

- 1. Performance tests or evaluations from October 2022-October 2024
- If applicable, any malfunctions that have occurred between October 2022 and October 2024 and the action taken, time period of malfunction, corrective actions, and type of malfunction
- 3. Any repairs/maintenance that has occurred (not related to malfunctions) from October 2022-October 2024
- 4. Total hours operated between October 2022 and October 2024
- 5. 4-hour rolling averages of the catalyst inlet temperature from October 2022-October 2024
- 6. Monthly pressure drop value from October 2022-October 2024
- 7. Fuel supplier certification records or fuel sample test data from October 2022-October 2024

ZJ provided the requested records on November 20, 2024. Upon review offsite of the records, all appeared to be acceptable.

The onsite inspection was completed on November 21, 2024 by HW, accompanied by Emily Crimmins. AQD staff arrived at the facility at 8:55am and departed at 9:31am. Weather conditions at the time of the inspection were cloudy, with winds 9mph from the west and 35° F. No offsite odors or visual emissions were noted. DTE staff ZJ and Doug Hanks, site operator, provided a tour of the site which began with a safety briefing. DTE staff showed each of the five engines on site and the following hours of operation were noted:

Engine 11-1: 11,423 Engine 11-2: 12,154 Engine 11-3: 3,403 Engine 11-4: 11,956 Engine 11-5: 62,572

To reduce carbon monoxide (CO) and volatile organic compound (VOC) emissions the facility installed oxidation catalysts on the generators in 2012 to comply with 40 CFR Part 63, Subpart ZZZZ. The oxidation catalysts will assist in reducing CO emissions by the required 70% or more. To ensure the CO emissions reduction is being met, the facility performed an initial performance test on the engine, per special condition (SC) V.1., and was received by AQD staff on September 24, 2012. Subsequent testing is required every 8,760 hours or 3 years, whichever comes first. However, if the engine is non-operational, the facility can conduct the performance test when the engine is started up again. Since the initial stack test, there have been tests in 2018, 2021, and most recently in May 2024, all of which have been sufficient.

Continuous monitoring of the inlet temperature and differential pressure across the catalyst ensures the catalyst reduces CO emissions and the engine meets the emission limit. Inlet temperature (must be between 450°F and 1350°F) and pressure differential (cannot be more than 2 inches of water from the pressure drop across the catalyst) for the time periods reviewed were in the appropriate operating range. The oxidation catalysts and stacks on each engine were observed from the ground and did not appear to have concerns. Additionally, the diesel fuel tank appeared acceptable and is exempt from permitting. Operation of the facility is conducted remotely from the DTE Electric Company offices in Southeast Michigan with local site operators performing maintenance and emergency support. The source is a minor source for hazardous air pollutants and a major source for greenhouse gases, NOx, SOx, and CO.

Conclusion

Based on the observations made and records reviewed, DTE Oliver Peaking Station appears to be in compliance with ROP No. MI-ROP-B2802-2023 and applicable air pollution control rules.

Haly Willman DATE 12/10/2024

SUPERVISOR