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

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| FACILITY: DTE ENERGY SERV-FOR | SRN / ID: N7723 | | | | | |
| LOCATION: 17600 MICHIGAN AVE, I | DISTRICT: Detroit | | | | | |
| CITY: DEARBORN | COUNTY: WAYNE | | | | | |
| CONTACT: | ACTIVITY DATE: 07/28/2020 | | | | | |
| STAFF: Katherine Koster | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT | | | | |
| SUBJECT: FY20 Targeted Inspection | | | | | | |
| RESOLVED COMPLAINTS: | | | | | | |

Reason for Inspection: Targeted

Personnel present: Jared Kolwyck, DTE Corporate, Eddie Beauchamp, DTE employee

Inspected by: Katie Koster, AQD

Facility phone number: 513-288-4453

FACILITY BACKGROUND

DTE Energy Services (DTEES) owns and operates four diesel fired generators, 2 MW each, which provide power to the Ford World Center Complex in the event that the supply from the power grid is reduced or eliminated. These generators do not have dedicated on-site staff. Staff is present as needed for routine maintenance and troubleshooting. Under the current contracts, Ford accepts electricity at a reduced rate from Edison in exchange for granting Edison the flexibility of reducing or interrupting the load at any time Edison chooses; hence the need for the emergency generators which Edison agreed to install. Edison operates the generators and access to the building is restricted to Ford personnel unless there is an emergency. DTE is responsible for environmental compliance and permits. DTE also has the final authority to decide load curtailments. Based on a review of the contracts, AQD staff previously determined that these sources should be considered two separate sources (please see facility manila file for full analysis and explanation). The current contract was renewed in 2015 and according to DTE, remains almost entirely unchanged. Historically, the concern was that if the two sources were considered one stationary source, Ford World Headquarters recently installed multiple emergency generators as part of a new data center and has submitted a Title V application.

COMPLAINT/COMPLIANCE HISTORY

I last inspected this facility in 2015. At that time, no compliance problems were identified.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING LOVs

None

INSPECTION NARRATIVE

On July 28, 2020, AQD inspector Katie Koster arrived at the DTE generators located in the parking lot of the Ford World Headquarters building. I observed the two stacks belonging to the four DTE emergency generators. No visible emissions were observed. I met with Mr. Jared Kolwyck, DTE corporate, and Eddie Beauchamp, DTE engineer. Emergency generators are labeled: B1, C1, A1, and C2. All generators are 2 MW or 2600 hp, air cooled, diesel fueled. Diesel is stored in a 10,000 gallon above ground tank and pumped to a 250 gallon day tank on each generator. The generators were installed in 1996. Apart from the times the generators are needed for actual energy supply, the generators are run every other week for ½ hour. While the generators can be remotely started, they

have to be manually reset on site by DTE. There are two exhaust stacks on the roof of the building. Hour clock readings were as follows (hours are total since installation): B1 - 530 hours (466, 2015 reading, 410, 2009 reading) C1 - 526 hours (463, 2015 reading, 411 2009 reading) A1 - 523 hours (462, 2015 reading, 408 2009 reading) C2 - 524 hours(463, 2015 reading, 411 2009 reading) Mr. Kolwyck stated that only routine maintenance has been performed on the generators. We also discussed the recordkeeping associated with the permits. The generators are subject to the RICE MACT. The facility has chosen to do the oil analysis program in lieu of changing the oil annually. The air cleaner, spark plugs, hoses, belts, intake and exhaust are inspected monthly. Fuel filters are replaced annually.

APPLICABLE RULES/PERMIT CONDITIONS

Permit 183-00A – This is an opt out permit for NOx (Permit conditions have been paraphrased for brevity) S.C. 1 NOT APPLICABLE. This condition is obsolete. S.C. 2 IN COMPLIANCE. The four generators are as stated. Exhaust gases from B1 and C1 exhaust out of a common vertical stack and A1 and C2 share a common vertical stack. S.C. 3 IN COMPLIANCE. Shall not operate any of the generators for more than 250 hours per 12 month rolling time period as determined at the end of each calendar month. Written log of hours shall be kept on file for five years. Each generator is well below this limit (12.75 hours was the highest 12 month rolling for any generator during the July 2019 – June 2020 12 month rolling time period). See Appendix A. S.C. 4 UNABLE TO DETERMINE. Visible emissions shall not exceed a six minute average of ten percent. Generators were not in operation at the time of the inspection. S.C. 5 IN COMPLIANCE. NOx emissions shall not exceed 24.3 tons per year based on a 12 month rolling time period as determined at the end of each calendar month. Records shall be kept on file for a period of five years. See Appendix A. The highest NOx 12 month rolling emissions from July 2019 – June 2020 were 1.24 tons per year. S.C. 6 IN COMPLIANCE. Sulfur content in the fuel oil fired in generators shall not exceed .05% by weight. Most recent fuel test was conducted on February 28, 2020 by Paragon Laboratories. The results were 6.5 ppm of sulfur or 0.00065 %m/m. See attached. Acid Rain Provisions The previous inspection determined the facility is exempt from Acid Rain Requirements. These units meet the new units exemption at 40CFR 72.7 by virtue of the following: 1. Installed after Nov 15, 1990 2. Nameplate capacity is 2 MWe; less than 25 MWe 3. Unit burn gaseous fuel with sulfur content at or less than 0.05% by weight RICE MACT Did not evaluate the **RICE MACT** at this time.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS

N/A. All lots are paved.

MAERS REPORT REVIEW

2019 MAERS was submitted timely and reviewed as part of this inspection. Emissions were reduced by 17% from the previous year. This is directly correlated with a 17% reduction in fuel usage from the prior year. NOX emissions were approximately 1.1 tons for calendar year 2019.

FINAL COMPLIANCE DETERMINATION

At the time of the inspection, facility appears to be in compliance with state and federal regulations in this report.

NAME Katherine Koster

DATE 5/13/2021

SUPERVISOR ____ April Wendling