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

N550565607			
FACILITY: FCA US LLC		SRN / ID: N5505	
LOCATION: 1035 W ENTRANCE DR, AUBURN HILLS		DISTRICT: Warren	
CITY: AUBURN HILLS		COUNTY: OAKLAND	
CONTACT: David Jump ,		ACTIVITY DATE: 11/04/2022	
STAFF: Mark Dziadosz	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT: On-site scheduled inspection			
RESOLVED COMPLAINTS:			

On Friday, November 4, 2022, I, Michigan Department of Environment Great Lakes and Energy-Air Quality Division staff Mark Dziadosz, conducted an announced scheduled inspection of FCA US LLC (N5505), located at 1035 West Entrance Drive Auburn Hills, Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, and Permit to install (PTI) No. 199-10A.

I arrived at FCA US LLC (FCA) at 10:00 AM and met with David Jump, Nick George, and Scott Crum. Prior to the inspection, records were requested electronically. Upon arrival, David, Nick, Scott and I discussed the records and operations. I was then taken on a tour of the facility.

The facility has 5 full time employees onsite and operates Monday to Friday 8:00-5:00. This facility provides cloud data services exclusively for FCA. The emission units that are subject to air quality regulations at these facilities are diesel-fired reciprocating internal combustion engines (RICE), which are compression ignition engine / electric generator sets that are operated on an emergency basis to provide electricity during a power outage. This facility has one above ground storage tank and four underground storage tanks, which in total provide a maximum storage capacity of 30,000 gallons of diesel fuel. Each tank is 6,000 gallons and is dedicated to one engine. The tanks appear to be exempt from the requirement to obtain a PTI by R284(2)(b).

The following serial number information was provided during this inspection:

EU-ENGINE-01: 16E0012393 (installed on 4/10/1995),

EU-ENGINE-02: 16E0012391 (installed on 4/10/1995),

EU-ENGINE-03: 16E0012394 (installed on 4/10/1995),

EU-ENGINE-04: 16E0012390 (installed on 4/10/1995),

EU-ENGINE-05: 526105080 (installed on 3/26/2011).

On April 13, 2018, the following values were observed on the non-resettable hours meters:

Generator number 1: 613.3 hours.

Generator number 2: 604.4 hours.

Generator number 4: 606.9 hours.

Generator number 5: 123.4 hours.

On November 4, 2022, the following values were observed on the non-resettable hours meters:

Generator number 1: 646 hours.

Generator number 2: 652.7 hours.

Generator number 3: 594.9 hours.

Generator number 4: 657.8 hours.

Generator number 5: 189.1 hours.

On November 4, 2022, the following values were observed on the resettable fuel meters (NOTE: These fuel meters reset to zero when the internal batteries are replaced.):

SUPPLY (gal.)	RETURN (gal.)
EU-ENGINE-01: 573.6	646.0
EU-ENGINE-02: 564.9	652.7
EU-ENGINE-03: 505.5	594.9
EU-ENGINE-04: 566.4	657.8
EU-ENGINE-05: 83.2	173.7

<u>PTI No. 199-10A</u>

EU-ENGINE-05

Special Condition I.1: A NOx limit of 5.2 tpy based on a 12-month rolling average. The facility is tracking fuel usage and using an emission factor in the PTI (2.42E-01 lbs NOx/gallon of diesel) to determine compliance. The highest 12-month rolling average Nox emissions was 0.08 tons.

Special Condition II.1: Fuel delivery manifests (statement of fuel sulfur content or fuel sulfur analysis) indicate that the maximum diesel fuel sulfur content limit of 15ppm was met with each delivery.

Special Condition II.2: The 12-month rolling diesel fuel use of EU-ENGINE-05 for the period ending in October 2022 was 110.4 gallons, which appears to indicate compliance with the permitted limit of 42,976 gallons per 12-month rolling time period.

Special Condition III.1 and 2: The permittee appears to be operating EU-ENGINE-05 in accordance with manufacture's specifications and complying with all provisions of 40 CFR Part 60 Subpart A and IIII.

Special Condition III.3 and Special Condition VI.6: A review of the permittee's records appears to indicate that the 12-month rolling hours for maintenance checks and readiness testing did not exceed 100 hours, which appears to indicate compliance with these permit conditions. Between 2018 and November 4, 2022 the engine was used 65.7 hours.

Special Condition IV.1: The engine is equipped with a non-resettable hours meter. During inspection the meter read 189.1 hours.

Special Condition VI.2: the permittee provided records of the diesel fuel usage rate for EU-ENGINE-05 on a monthly and 12-month rolling time periods.

Special Condition VI.3: Monthly and 12-month rolling time period NOx emission records for EU-ENGINE-05 indicate compliance with the 5.2 tons per year permit limit. The calculated 12-month rolling emissions of NOx from EU-ENGINE-05 for calendar year ending in October 2022 was 0.08 tons.

Special Condition VI.4: fuel shipment delivery records appear to indicate compliance with the diesel fuel sulfur content of 15 ppm or less, by weight.

NOTE: Each fuel delivery supplies fuel for EU-ENGINE-05 and FG-ENGINES. It is also important to note that this special condition (SC) and SC VI.2 of FG-ENGINES allows the permittee to use one of two methods to demonstrate compliance with the fuel sulfur content. The monitoring/recordkeeping SC states in part, "The permittee shall keep separate records of the sulfur content calculations for EU-ENGINE-05, in percent by weight, on an annual average, based on fuel analysis data. Alternately, the permittee shall keep, for EACH fuel shipment delivery, a statement from the fuel supplier indicating that the diesel fuel sulfur content is 15 ppm or less, by weight." FCA has elected to demonstrate compliance by using a statement from the fuel supplier. FCA provided a statement from the fuel supplier for the shipment received on 3-25-2021. The statement associated with this delivery appears to indicate compliance with the alternative recordkeeping requirements of EU-ENGINE-05, SC VI.4. The sulfur content recordkeeping for FG-ENGINES, SC VI.2 also appears to be satisfied by the fuel delivery statement because this SC does not require a fuel analysis.

Special Condition VI.5: manufacture certification documentation provided appears to indicate that EU-ENGINE-05 meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII.

Special Condition VI.6: the permittee is monitoring the hours of operation of EU-ENGINE-05 and the reason it was in operation on a monthly and a 12-month rolling basis.

Special Condition VIII.1: the stack appears to discharge unobstructed vertically to the ambient air. Stack parameters were not verified during this inspection.

FG-ENGINES

Special Condition I.1: An opacity limit of 10%, a NOx limit of 42.8 lb/hr for each engine individually and 171.2 lb/hr for all engines combined, and a SO2 limit of 0.06

Ib/MMBtu. According to general condition 13 in PTI 199-10A, the AQD has not requested stack testing to verify emission limits at this time.

Special Condition II.1: fuel use records in 2022 appear to indicate that the fuel use rate of each engine within this flexible group has not exceeded 83.5 gallons per hour.

Special Condition III.1: records provided appear to indicate compliance with the permitted limit of operating each engine in this flexible group less than or equal to 387 hours per 12-month rolling time period.

Special Condition V.1: The AQD has not requested stack testing to verify NOx emission limits at this time.

Special Condition VI.2: fuel shipment delivery records indicate compliance with maintaining records of the fuel sulfur content by weight. See EU-ENGINE-05, Special Condition VI.4 above for additional details.

Special Condition VI.3: the permittee recorded the diesel fuel usage rate for each engine in FG-ENGINES in gallons per hour.

Special Condition VI.4: the permittee recorded the hours of operation for each engine in FG-ENGINES on a monthly and 12-month rolling time periods.

Special Condition VIII.1: the stack appears to discharge unobstructed vertically to the ambient air. Stack parameters were not verified during this inspection.

Conclusion

The facility appears to be operating in compliance with PTI 199-10A, the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451.

NAME

DATE December 1, 2022 SUPERVISOR