

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

P087558295

FACILITY: RIVERSIDE - ECHO 9 CPF		SRN / ID: P0875
LOCATION: Section 9 SE NW SE, T31N-R7W Echo Township, CENTRAL LAKE		DISTRICT: Cadillac
CITY: CENTRAL LAKE		COUNTY: ANTRIM
CONTACT: Natalie Schrader , Compliance Coordinator		ACTIVITY DATE: 12/01/2020
STAFF: Jodi Lindgren	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

On Tuesday, December 1 2020, Jodi Lindgren of the Department of Environmental, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted an unannounced field inspection of Riverside Energy Michigan, LLC (Riverside) – Echo 9 CPF (P0875) located at the end of an access road 0.33 miles west of Graham Road. The access road is approximately 0.3 miles south of the intersection of Scofield Road and Graham Road in section 9, T31N-R7W, Echo Township, Antrim County, Michigan, 49622. The facility was unmanned at the time of inspection.

The Echo 9 CPF is an opt-out facility with PTI 153-17A issued on May 14, 2019. The facility has one compressor building that houses a compressor, compressor engine, and Rule 201 exempt process equipment.

SCHEDULED INSPECTION

A. EUENGINE1 – One natural gas fired reciprocating engine that is a 625 hp CAT G398 turbo aspirated rich burn engine with no emission control equipment. The engine serial number is 66B03302 with a rebuild date of June 12, 2012 and unit number 297. At the time of the inspection, the engine was running with a RPM of 852, oil temperature of 189°F, oil pressure of 32 psi, coolant system temperature of 185°F, a compressor oil temperature of 179°F, and a compressor oil pressure of 67 psi. This was consistent with the records kept on site which indicated that on December 1, 2020, the engine was running with an RPM of 854, engine oil pressure 33 psi, coolant system temperature of 182°F, a compressor oil temperature of 172°F, and a compressor oil pressure of 66 psi.

1. Emission Limits – For EUENGINE1, PTI 153-17A established a NOx limit of 86 tons per year (tpy) calculated at the end of each month using a 12-month rolling time period. Records provided by Riverside indicate 46.38 tpy of NOx emissions calculated without control for a 12-month rolling time period of November 2019 to October 2020. These records indicate compliance with the emission limits established in PTI 153-17A.

2. Material Limits – PTI 153-17A restricts the EUENGINE1 fuel to only natural gas and the usage to 30.3 MMCF per 12-month rolling time period. Records provided by Riverside indicated that only natural gas was burned and the usage was reported as 1.4 MMCF for a 12-month rolling time period of November 2019 to October 2020 demonstrating compliance.

3. Process/Operational Restrictions – PTI 153-17A requires an AQD approve preventative maintenance/malfunction abatement plan (PM/MAP). An AQD approval letter dated June 14, 2019 was issued for the PM/MAP received on June 10, 2019.

4. Design/Equipment Parameters – PTI 153-17A restricts the engine capacity to not exceed 625 hp and dictates the installation, calibration, maintenance, and operation of a monitoring device to measure natural gas usage of EUENGINE1 on a continuous basis. Riverside reports the engine is rated and tuned to 625 hp, which is supported by manufacturer data. Riverside demonstrated compliance by provided AQD staff with a calibration and maintenance record as well as a natural gas usage report for the time period November 2019 to October 2020.

5. Testing/Sampling – PTI 153-17A dictates that the AQD District Supervisor may request testing NOx and CO emission verification. No testing has been requested by the AQD Supervisor during the time constraints of this compliance evaluation.

6. Monitoring/Recordkeeping – Riverside demonstrated compliance with monitoring and recordkeeping requirements of PTI 153-17A to document natural gas usage and calculate NOx and CO emission for EUENGINE1. A maintenance log conducted according to the approved PM/MAP is mandated in the PTI 153-17A as well. Riverside provided AQD staff the required documentation upon request.

7. Reporting – Recordkeeping requirements pursuant PTI 153-17A were provided to AQD staff upon request.

8. Stack/Vent Restrictions – PTI 153-17A requires EUENGINE1 to have a stack with a maximum diameter of eight inches and a minimum height above ground level of 38 feet. The engine exhaust stack appeared to meet these requirements during the inspection.

9. Other Requirements – There are no other requirements associated with this flexible unit; therefore, this section is not applicable.

EVALUATION SUMMARY

Conclusion – Based upon the Full Compliance Evaluation, it appears the source was in compliance with PTI 153-17A at the time of the evaluation.

NAME _____

DATE _____

SUPERVISOR _____