D040050457

DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

FACILITY: RIVERSIDE - CUSTER 7 BOOSTER SITE		SRN / ID: P0100
LOCATION: 7820 Comfort Road, BELLAIRE		DISTRICT: Cadillac
CITY: BELLAIRE		COUNTY: ANTRIM
CONTACT: Brandon McDowell , Field Representative		ACTIVITY DATE: 01/16/2020
STAFF: Jodi Lindgren	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2020 Full Compliance	Evaluation, site inspection and records review.	
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

On Friday November 1 2019, 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) – Custer 7 Booster Site located at 7820 Comfort Road, Bellaire, Custer Township, Antrim County, Michigan, 49615. The facility was operating but unmanned at the time of inspection.

The Custer 7 Booster is an opt-out facility with PTI 76-10 issued on May 10, 2010. The facility is subject to 40 CFR Part 63 Subpart ZZZZ which EGLE-AQD is not delegated to enforce. The facility consists of a compressor building which houses a compressor and a compressor engine. No additional production or processing equipment was present.

SCHEDULED INSPECTION

- **A. EUENGINE** One 400 hp CAT G3408 TA rich burn natural gas fired reciprocating engine equipped with no emission control. The engine serial number is 6NB02396 with a rebuild date of September 7, 2017 and the unit number is 195. At the time of the inspection, the engine was running with a RPM of 1284, oil temperature of 208° F, coolant system temperature of 185°F, a compressor oil temperature of 125°F, a compressor oil discharge temperature of 154°F, and 79,843 hours of operation. This was consistent with the records kept on site which indicated earlier on November 1, 2019 the engine was running with a RPM of 1283, oil pressure of 56 psi, oil temperature of 208°F, coolant system temperature of 186°F, a compressor oil temperature of 123°F, and a compressor oil discharge temperature of 152°F.
- 1. Emission Limits PTI 76-10 established a NOx limit of 82.3 tons per year (tpy) and a CO limit of 6.2 tpy calculated at the end of each month using a 12-month rolling time period. Records provided by Riverside indicate 47.62 tpy of NOx emissions and 3.58 tpy CO emissions calculated for a 12-month rolling time period of October 2018 to September 2019. These records indicate compliance with the emission limits established in PTI 76-10 (records are attached).
- 2. Material Limits There are no material limits associated with this emission unit; therefore, this section is not applicable.
- Process/Operational Restrictions -PTI 76-10 requires AQD approved an preventative maintenance/malfunction abatement plan (PM/MAP). An AQD approval letter dated November 15, 2017 was issued for the PM/MAP received on October 16, 2017. The PM/MAP dictates the engine shall receive routine monitoring and maintenance including, daily performance monitoring, basic service checks every 60 to 90 days, motor oil and filter changes every 3,000 operation hours, and an engine rebuild or replacement every 85,000 operation hours. Monitoring records provided by Riverside demonstrate daily monitoring of the various system parameters necessary to ensure the engine is functioning within safe operational constraints. A provided maintenance log indicates the performance of routine maintenance including eight cooling system filter changes, five basic service checks, and four motor oil and filter changes in the time period of October 2018 to September 2019. At the time of the inspection, the engine did not require a rebuild or replacement having 79,843 operation hours. These records indicate compliance with the AQD approved PM/MAP (records are attached).
- 4. Design/Equipment Parameters PTI 76-10 dictates the installation, calibration, maintenance, and operation of a monitoring device to measure natural gas usage of EUEINGINE on a continuous basis. 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 of October 2018 to September 2019 (records are attached).
- 5. Testing/Sampling PTI 76-10 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 PTI 76-10 mandates recordkeeping for all emissions calculations, natural gas usage for EUENGINE, and monitoring and maintenance activities logs. Riverside provided AQD staff with all the requested recordkeeping documentation for the time period of October 2018 to September 2019 indicating compliance with PTI 76-10.
- 7. Reporting PTI 76-10 dictates that the AQD District Supervisor be notified if the engine is replaced. The engine covered by PTI 76-10 has not been replaced.
- 8. Stack/Vent Restrictions PTI 76-10 a stack with a maximum diameter of six inches and a minimum height above ground level of 34.65 feet. The engine exhaust stack appeared to meet these requirements during the inspection.
- 9. Other Requirements There are no other requirements associated with the continued compliance of EUENGINE; therefore, this section is not applicable.

EVALUATION SUMMARY

Conclusion – Based upon the Full Compliance Evaluation, it appears the source was compliant with PTI 76-10 at the time of the evaluation.