

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection**

N605755436

<b>FACILITY:</b> RIVERSIDE ENERGY MICHIGAN, LLC - WARNER 13 CPF		<b>SRN / ID:</b> N6057
<b>LOCATION:</b> 11395 WILDERNESS TRL, ALBA		<b>DISTRICT:</b> Cadillac
<b>CITY:</b> ALBA		<b>COUNTY:</b> ANTRIM
<b>CONTACT:</b> Natalie Schrader ,		<b>ACTIVITY DATE:</b> 08/07/2020
<b>STAFF:</b> Jodi Lindgren	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Field inspection and records review for FY 2020 FCE		
<b>RESOLVED COMPLAINTS:</b>		

**FACILITY DESCRIPTION**

On Friday August 7 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) – Warner 13 CPF Site located at the end of Wildwood Trail approximately 0.3 miles east of Dobleski Road and approximately 0.43 miles north of Thumm Road in section 13, T31N-R5W of Warner Township, Antrim County, Michigan, 49730. The facility was operating and unmanned at the time of inspection. Facility records for July 1 2019 to June 30 2020 were provided by Riverside according to AQD request.

The Warner 13 CPF is a minor source facility with PTI 280-09 issued on January 8, 2010. The facility is subject to 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 63 Subpart HH which EGLE-AQD is not delegated to enforce. The facility consists of a compressor building housing a compressor, a compressor engine, phase separators, and a glycol dehydrator with associated process heater and vapor recovery unit. The glycol dehydrator is reported as exempt from Rule 201 via Rule 288.

**SCHEDULED INSPECTION**

**A. EUENGINE** – One 625 hp CAT 398 TA rich burn natural gas fired reciprocating engine equipped with catalyst control and air fuel ration controller (AFRC). The engine serial number is 73B00739 with a rebuild date of October 30, 2014, and the unit number is 810. At the time of the inspection, the engine oil pressure of 55 psi, coolant system temperature of 189°F, a compressor oil temperature of 175°F, a compressor oil pressure of 64 psi, and 53,115 hours of operation. Riverside’s daily records were available on site and demonstrate consistency with an engine oil pressure of 59 psi, coolant system temperature of 185°F, a compressor oil temperature of 172°F, and a compressor oil pressure of 69 psi.

1. **Emission Limits** – PTI 280-09 established EUENGINE emission limits of 10 tpy of NOx and 20 tpy of CO on a 12-month rolling time period. The records indicate emissions for the engine total 0.47 tpy of NOx, and 1.69 tpy of CO calculated for a 12-month rolling time period of July 2019 to June 2020. An engine emission analysis was completed April 6, 2020 by Archrock which verified the emission control efficiency of the catalyst.

2. **Material Limits** – There are no material limits associated with this emission unit; therefore, this section is not applicable.

3. **Process/Operational Restrictions** – A preventative maintenance/malfunction abatement plan (PM/MAP) was submitted and approved by AQD. An AQD approval letter dated July 8, 2010 was issued for the PM/MAP. The PM/MAP dictates the engine shall receive routine monitoring and maintenance. The records provided by Riverside indicate compliance with the AQD approved PM/MAP.

4. **Design/Equipment Parameters** – PTI 280-09 prohibits the operation of EUENGINE without a control device installed, maintained, and operated according to AQD approved PM/MAP. The records provided by Riverside indicate that the approved control was run 100% time during the time period of July 2019 to June 2020 and therefore compliant with equipment restriction. The PTI also requires a continuous natural gas usage monitoring device be installed, calibrated, maintained, and operated in a satisfactory manner. Riverside provided records demonstrating continuous monitoring. EUENGINE was reported as using 1948 Mcf of natural gas fuel.

5. **Testing/Sampling** – PTI 280-09 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 280-09 mandates the monitoring and recordkeeping of natural gas usage, maintenance activities, add-on control device usage, and emission calculations for EUENGINE. Riverside provided AQD staff with EUENGINE fuel usage logs, monitoring and maintenance information, add-on control maintenance and usage hours, and emission calculations. The provided documentation indicating compliance with PTI 280-09.**

**7. Reporting – The permit requires Riverside to notify AQD if the Cat 398 engine is replaced with an equivalent-emitting or lower-emitting engine. The engine has not been changed.**

**8. Stack/Vent Restrictions – PTI 280-09 dictates a stack with a maximum exhaust diameter of twelve inches and a minimum height above ground level of 23.5 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 280-09 at the time of the evaluation.**

NAME \_\_\_\_\_

DATE \_\_\_\_\_

SUPERVISOR \_\_\_\_\_