

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Other

N604963451

FACILITY: RIVERSIDE - WARNER 36 CPF		SRN / ID: N6049
LOCATION: 1022 GORMEYS RD SEC 26, CHESTONIA		DISTRICT: Cadillac
CITY: CHESTONIA		COUNTY: ANTRIM
CONTACT: Natalie Schader , Compliance Coordinator		ACTIVITY DATE: 06/24/2022
STAFF: Jodi Lindgren	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Record Review. Note the On-Site inspection was completed by S Leblanc and the resulting report is CA_N604960666		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

Jodi Lindgren of the Department of Environmental, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted a review of records for Riverside Energy Michigan, LLC (Riverside) – Warner 36 CPF Site located at 1022 Gormeys Road in section 25, T31N-R5W of Chestonia Township, Antrim County, Elmira, Michigan, 49730.

The Warner 36 CPF is an opt-out facility with PTI 600-96 issued on November 21, 1996. The facility may be subject to 40 CFR Part 63 Subpart ZZZZ (MACT ZZZZ) and 40 CFR Part 63 Subpart HH (MACT HH). EGLE-AQD is not delegated authority to enforce MACT HH. EGLE-AQD has been delegated authority to implement and enforce MACT ZZZZ, but compliance assessments for area sources have not been completed. The facility's equipment permitted under Rule 201 includes a compressor engine, glycol dehydrator with associated process heaters, and fixed roof tank. The facility is reported to be producing natural gas from the Antrim Formation. All the records from June 1, 2021, through May 31, 2022, were reviewed.

An onsite inspection will be completed and documented in a separate compliance report.

RECORDS REVIEW

A. COMPRESSOR ENGINE – One 1150 hp CAT 3516 TA lean burn natural gas fired reciprocating engine with no emission control. The engine skid unit number is 1026

1. Emission Limits – PTI 600-96 established facility wide emission limits. Emission limits for Individual emission units were not established. However, the records supplied by Riverside provide emission calculations for the engine. The records indicate emissions for the engine total 7.06 tpy of NO_x, 8.47 tpy of CO, and 2.31 tpy of VOC calculated for a 12-month rolling time period of June 2021 to May 2022.

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

3. Process/Operational Restrictions – PTI 600-96 dictates proper installation, maintenance, and operation of all the components of the process equipment. Thorough operation monitoring and maintenance records provided by Riverside demonstrate daily monitoring of the various system parameters and regular preventative maintenance necessary to ensure the engine is functioning within safe operational constraints. A provided maintenance log indicates the performance of routine maintenance including engine oil and filter changes, spark plug replacement, sensor cleaning and calibration, valve replacement, and electrical system testing.

4. Equipment Parameters – There are no equipment parameters associated with this emission unit; therefore, this section is not applicable.

5. Testing – No testing was conducted during the time constraints of this compliance evaluation.

6. Monitoring – PTI 600-96 mandates natural gas usage for all on-site equipment be monitored on a continuous basis. Riverside provided AQD staff with an engine fuel usage log for the time period of June 2021 to May 2022. The provided documentation reports monthly fuel usage, which was 2.516 MMCF in May 2022, and a total usage of 31.401 MMCF for a 12-month rolling time period of June 2021 to May 2022 indicating compliance with PTI 600-96.

7. Recordkeeping/Reporting/notification – The recordkeeping and reporting requirements for all emission calculations, natural gas usage, and monitoring and maintenance activities logs was completed in a timely fashion.

8. Stack/Vent Restrictions – There are no stack nor vent restrictions associated with the engine; therefore, this section is not applicable.

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

B. GLYCOL DEHYDRATOR – Glycol dehydration system (dehy) equipped with process heaters and pump processing natural gas from the Antrim Formation. The dehy is identified as exempt from R 336.1201(1) by meeting the requirements of exemption R 336.1288(2)(b)(ii), which limits processing to only Antrim natural gas.

1. Emission Limits – PTI 600-96 established facility wide emission limits. Emission limits for Individual emission units were not established. However, records supplied by Riverside does provide emission calculations for the dehy. The records indicate emissions for the dehy process heaters total 0.58 tpy of NOx, 0.14 tpy of CO, and 0.01 tpy of VOC and emissions for the dehy pump total 0.03 tpy of VOC calculated for a 12-month rolling time period of June 2021 to May 2022.

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

3. Process/Operational Restrictions – There are no process or operational restrictions associated with this emission unit; therefore, this section is not applicable.

4. Equipment Parameters – There are no equipment parameters associated with this emission unit; therefore, this section is not applicable.

5. Testing – There are no testing requirements associated with this emission unit; therefore, this section is not applicable.

6. Monitoring – PTI 600-96 mandates natural gas usage for all on-site equipment be monitored on a continuous basis. Riverside provided AQD staff with a dehy fuel usage log for the time period of June 2021 to May 2022. The provided documentation reports monthly fuel usage, which was 0.459 MMCF in September 2019, and a total usage of 5.585 MMCF for a 12-month rolling time period of June 2021 to May 2022 indicating compliance with PTI 600-96. (records are attached)

7. Recordkeeping/Reporting/notification – There are no recordkeeping, reporting, nor notification requirements associated with this emission unit; therefore, this section is not applicable.

8. Stack/Vent Restrictions – There are no stack nor vent restrictions associated with the dehy; therefore, this section is not applicable.

9. Other Requirements – The dehy has been reported to meet an exemption (40 CFR 63.764(e)(1)(i)) from MACT HH with documentation of an actual annual average flow rate of natural gas less than 85,000 cubic meters per day or 3 MMCF/day. Records provided by Riverside indicate an actual annual average flow rate of 646 cubic meters per day.

C. FACILITY – One 1150 hp CAT 3516 TA lean burn natural gas fired reciprocating engine with no emission control and a Glycol dehydration system (dehy) processing natural gas from the Antrim Formation.

1. Emission Limits – PTI 600-96 established a NO_x emission limit of 89.9 tons per year (tpy), a CO emission limit of 89.9 tpy, VOC emission limit of 89.9 tpy, and HAP emission limit of 9 tpy calculated at the end of each month using a 12-month rolling time period. Records provided by Riverside indicate emissions for the facility total 7.64 tpy of NO_x, 8.61 tpy of CO, 2.32 tpy of VOC, and 0 tpy of HAPs calculated for a 12-month rolling time period of June 2021 to May 2022. The calculations indicating 0 HAPS appear to be correct based on the emission factor for an Antrim natural gas dehy provided in Appendix A of PTI 600-96. These records indicate compliance with the emission limits established in PTI 600-96.

2. Material Limits – PTI 600-96 dictates only sweet natural gas may be processed at the facility. An iron sponge is utilized by the facility to remove H₂S from the field gas prior to entering the process equipment. Riverside provided records of weekly gas analyses from upstream and downstream of the iron sponge to verify H₂S to is sufficiently reduced to meet the definition of sweet natural gas.

3. Process/Operational Restrictions – PTI 600-96 mandates a log of all significant maintenance activities and repairs at the facility be kept on file. Riverside provided records indicate compliance with the maintenance and repair requirements of PTI 600-96.

4. Equipment Parameters – There are no equipment parameters associated with the facility; therefore, this section is not applicable.

5. Testing – No testing was conducted during the time constraints of this compliance evaluation

6. Monitoring – PTI 600-96 mandates that natural gas usage and natural gas production for at the facility be monitored, recorded, and maintained on a continuous basis. Riverside provided AQD staff with a fuel usage log and facility production data for the time period of June 2021 to May 2022. The provided documentation reports a monthly facility fuel usage, which was 2.81 MMCF in June 2021, and a total facility fuel usage of 31.4 MMCF for a 12-month rolling time period of June 2021 to May 2022 indicating compliance with PTI 600-96.


7. Recordkeeping/Reporting/notification – PTI 600-96 establishes recordkeeping for all emissions calculations, facility natural gas usage, and monitoring and maintenance activities logs. Riverside provided documentation for the required calculations denoting compliance with PTI 600-96.

8. Stack/Vent Restrictions – There are no stack nor vent restrictions associated with the facility; therefore, this section is not applicable.

9. Other Requirements – PTI 600-96 required an applicability determination of 40 CFR Part 60 Subpart KKK (NSPS KKK) be completed and compliance with the regulation if applicable. It was determined that the facility did not meet the definition of a natural gas processing plant and therefore not subject to NSPS KKK.

EVALUATION SUMMARY

Conclusion – Based upon the review of records, it appears the source was compliant with PTI 600-96 at the time of the evaluation.

NAME  DATE _____ SUPERVISOR _____