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

N807065613

FACILITY: RIVERSIDE - NEW CALEDONIA CPF		**SRN / ID:** N8070
LOCATION: NW NE SEC 20 T8N R6E, CALEDONIA TWP		**DISTRICT:** Gaylord
CITY: CALEDONIA TWP		**COUNTY:** ALCONA
CONTACT: Natalie Schrader , Environmental Specialist		**ACTIVITY DATE:** 11/29/2022
STAFF: Kurt Childs	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: 2023 FCE		
RESOLVED COMPLAINTS:		

On November 29, 2022 I traveled to N8070 Riverside Energy Michigan New Caledonia CPF located in Caledonia Township, Alcona County for an unannounced scheduled inspection to determine compliance with PTI 188-08. This is an opt-out source. Note that this facility was formerly owned by Riverside Operating LP, a name change to Riverside Energy Michigan was processed on 9/02/21.

LOCATION

The source is located west of Hubbard Lake. From M-32, travel south on M-65, turn east onto Hubbard lake Trail and follow approximately 7 miles. Turn left/north onto Yukon Rd (private road, many signs at entrance), follow 1-2 miles. The source is located onside next to a Trendwell facility (N7901).

EQUIPMENT ON SITE

The facility consists of 1 engine - a permitted Caterpillar 399 TA 830 hp engine with catalyst.

Onsite there is a lined tank farm with 2 tanks under 400 bbl, and several small storage tanks – used oil, engine oil are inside the building.

Per the permit the facility is located on Trendwell property and leased to Riverside. Next to the Riverside CPF is the Trendwell Wolf Creek CPF - N7901. During the permitted phase it was determined that the two CPFs operate independently from each other. Additionally, even if the emissions from both sources were combined, they would not be Title V subject. Therefore, they are 2 separate sources.

Riverside sends its brine to the Trendwell facility for disposal.

REGULATORY DISCUSSION

PTI 188-08 includes requirements for 1 engine and a dehy.

The engine is subject to 40 CFR Part 63, Subpart ZZZZ, which has been delegated to EGLE from EPA. However, EGLE is not currently making compliance determinations for area sources.

The dehy is subject to 40 CFR Part 63, Subpart HH, which also has not been delegated to EGLE from EPA.

INSPECTION NOTES

During the inspection the Caterpillar 399 TA engine was operating. No visible emissions or odors were noted.

The Caterpillar 399 TA was operating at 1186 RPM and had engine oil pressure of 75 PSI. The catalyst inlet temperature was 1035 degrees Fahrenheit (F), and outlet temperature was 1016 degrees F. The daily operating logs on-site indicate that the temperature drop across the catalyst is consistent with recent operations.

There is one dehy located in a separate small building. The dehy was operating at the time of the inspection with no noticeable odors. There is no real control device, just a drip tank and atmospheric vent.

RECORDS SPECIAL CONDITIONS:

SC 2.6, 2.10, 2.11 and 2.12 - Emission Limits and throughputs:

Parameter: EUENGINE1

	Limit	Reported
NOx (tpy, 12 month rolling)	22	4.17
CO(tpy, 12 month rolling)	20	5.87
Fuel (12-month Rolling MMCF)	NA	40.686

SC 2.3, 2.4, 2.8, 2.9 - Maintenance and PM-MAP:

The facility has a recently approved MAP from 8/31/2022. The engine is correctly listed in Appendix A of MAP. Records received were reviewed and meet conditions of MAP.

In response to the records request Trendwell stated EUENGINE1 operated zero hours without the catalyst. The permit allows for 200 hours.

Records show the temperature rises across the catalyst, which implies improper operation. However, daily logs observed on-site and provided by Trendwell indicate that this has been the standard operation for the past year. Emissions testing conducted during the year while the cat temps were in this inverted phase demonstrated destruction efficiencies of 90.9% for NOx and 92.4% for CO. Archrock, the engine service company is looking into the cause of the inverted cat temps. The inlet temperature has been greater than 750 degrees and the outlet temperature has been less than 1350 degrees, which are the parameters indicated in the MAP for proper operation.

SC 2.13a - Stacks:

The stack for EUENGINE1 is required to have a minimum height of 30 feet. At the time of the inspection, stack height was measured with a hand-held range finder using the average of three, 2 point readings. The estimated stack height was 45' and the diameter appeared to meet the maximum 16" diameter limit.

SC 3.1 and 3.2 - Sour gas verification:

Gas analysis was provided but does not contain hydrogen sulfide concentration. This facility processes gas from the Antrim formation which is not known to have significant levels of H2S.

MAERS

2021 MAERS was not reviewed this year.

COMPLIANCE DETERMINATION

Based on the scheduled inspection and records review, the facility appears to be in compliance with PTI 188-08.

NAME _____ DATE _____ SUPERVISOR Shane Nixon 2023.03.07 13:47:22 -05'00'