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

ACTIVITI NEFORT. OII-site inspection		
N728460330		
FACILITY: RIVERSIDE - BAGLEY 30		SRN / ID: N7284
LOCATION: NE SEC 19,T30N,R3W, BAGLEY TWP		DISTRICT: Gaylord
CITY: BAGLEY TWP		COUNTY: OTSEGO
CONTACT:		ACTIVITY DATE: 09/20/2021
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Monday, September 20. 2021, Caryn Owens of the DEQ-AQD conducted an on-site field inspection of the Riverside Energy Michigan, LLC – Bagley 30 facility (SRN: N7284) located in the northeast quarter of Section 19, Township 30 North, Range 3 West in Bagley Township, Otsego County, Michigan. More specifically, the entrance of the site is located on the south side of Old Alba Road, approximately 1/10 mile west of Fowler Lake Road and Old Alba Road intersection in Bagley Township, Otsego County, Michigan. The field inspection and records review were to determine compliance with permit to install (PTI) 211-03A. This facility is currently considered a minor source of air pollutants and an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ – RICE MACT).

### **Evaluation Summary**

The activities covered during this field inspection and records review appear to be in compliance with PTI 211-03A. No further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

### Source Description:

AQD was unaccompanied during the field inspection. The weather conditions were mostly sunny, with winds from the south at about 10 miles per hours, and 73 degrees Fahrenheit. The site consisted of one compressor building, a separator building, a glycol dehydrator building a small storage outbuilding on the northern portion of the Property, a 400-barrel brine tank, and two iron sponges.

The compressor building is the western-most building on the site and contains one engine that was operating during the inspection. The compressor engine was a caterpillar unit reportedly, a 1,340 horsepower (hp) CAT 3516LE lean burn engine. The engine was identified at the site as Unit #55, and the platform of the engine block says "GCS 55". The engine was operating at 1,368 revolutions per minute, 215 degrees Fahrenheit, and 60 pounds per square inch (psi) of pressure. The engine stack was located on the western portion of the building and contained a muffler. The stack was approximately 38 feet above ground surface (ags), no visible emissions were observed from the compressor engine stack.

Additionally, a 400-barrel capacity brine tank was located in the tank battery on the eastern portion of the site. The separator building is located in between the tank battery and compressor building which separated the brine water from the natural gas where the brine water was sent to the tank battery and the natural gas was compressed and moved through the pipeline. The glycol dehydrator processes natural gas from the Antrim formation and operates using exemption Rule 336.1288(2)(b)(ii).

#### **Records Reviewed**

<u>EUCOMPENGINE:</u> This emission unit is for a Caterpillar 3516LE 4-stroke 1340 horse power, turbocharged, low-emission, reciprocating engine.

- There are no Material Limits, Process/Operational Parameters, Testing/Sampling Requirements, Reporting Requirements, and Other Requirements associated with EUCOMPENGINE in PTI 211-03A.
- <u>Emission Limits</u>: Emission limits were 20 tons of NOX per year based on a 12-month rolling time period. Based on the records reviewed from September 1, 2020 through August 31, 2021, the highest

emissions reported were 16.02 tons of NOx per 12-month rolling time period, which were within the permitted emission limits. The NOx emissions were reported uncontrolled.

- **Design/Equipment Parameters:** The facility monitors the natural gas usage on EUCOMPENGINE on a continuous basis.
- <u>Monitoring/Recordkeeping</u>: The facility monitors the natural gas usage for EUCOMPENGINE on a continuous basis and records the monthly fuel use for each engine at the facility. The facility records monthly and 12-month rolling time-period records for NOx. The 12-month rolling time-period emissions are discussed above under emission limits.
- <u>Stack/Vent Restrictions:</u> Based on visible observations during the field inspection, the stack of the engine appeared to be at least 38 feet ags and appeared to be 12-inches in diameter.

# <u>FGRICEMACT:</u> Although not included in the PTI, this flexible group is for 40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, spark ignition (SI) RICE greater than 500 brake hp.

- There are no **Emission Limits**, **Material Limits**, and **Stack/Vent Restrictions** associated with FGRICEMACT.
- <u>Process/Operational Parameters:</u> The work practice standards to the RICE MACT under 40 CFR Part 63, Subpart ZZZZ, the work practice standards for non-emergency, non-black start 4SRB stationary engines that are less than or equal to 500 HP are the following:
- · Change oil and filter every 500 hours of operation or annually, whichever comes first.
- Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary, and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Based on the maintenance records reviewed, the spark plugs, hoses, and belts are observed and maintained on a regular basis. Additionally, the most recent oil and filter change was August 18, 2021.

- **Design/Equipment Parameters:** The operating hours of the engine are tracked and recorded at the facility.
- <u>Testing/Sampling</u>: The facility does not use the oil analysis program, therefore Testing/Sampling parameters are not applicable at this time.
- **Monitoring/Recordkeeping:** The facility monitors and records the maintenance of the engine which is attached. No performance testing has been completed at this site. AQD recently has obtained delegation of the federal regulation of 40 CFR Part 63, Subpart ZZZZ. The initial notifications would have been sent to EPA, since they were the delegated entity when the compressor engine was installed.
- Other Requirements:

EUCOMPENGINE appears to be operating in accordance with the FGRICEMACT under 40 CFR Part 63, Subpart ZZZZ.

NAME

DATE \_\_\_\_\_\_ SUPERVISOR \_\_\_\_\_\_



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