

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

P004249646

|  |                               |                           |
|--|-------------------------------|---------------------------|
| FACILITY: RIVERSIDE - VIENNA 23                      |                               | SRN / ID: P0042           |
| LOCATION: Vienna 23 CPF, VIENNA TWP                  |                               | DISTRICT: Gaylord         |
| CITY: VIENNA TWP                                     |                               | COUNTY: MONTMORENCY       |
| CONTACT: Natalie Schrader , SR. Production assistant |                               | ACTIVITY DATE: 06/28/2019 |
| STAFF: Bill Rogers                                   | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT  |
| SUBJECT: Scheduled inspection                        |                               |                           |
| RESOLVED COMPLAINTS:                                 |                               |                           |

On June 28, 2019, I inspected the Vienna 23 CPF. This facility is covered under Permit to Install 195-18. Natalie Schrader of Riverside Energy also sent me records to review to determine their compliance with the permit.

The only emission unit in the permit is EUENGINE1, a 4 stroke rich burn natural gas fired reciprocating internal combustion engine. It appears to have a catalytic oxidizer, but the company claims it has no control.

Table EUENGINE1, Conditions I.1 and I.2, set emission limits of 68 tons per year NOx and 39 tons per year CO. Emissions estimates, attached, claim emissions (with no control) of 11.38 tons NOx and 4.3 tons CO for 12 months. This complies with the permit conditions.

Condition II.1 requires only natural gas as fuel. There were no other possible sources of fuel apparent when I inspected the facility. This complies with the permit condition.

Condition III.1 requires a Malfunction Abatement Plan. The company submitted one dated February 4, 2019, and AQD approved it effective February 22, 2019. This complies with the permit condition.

Condition III.2 limits operation without any add-on control device to no more than 200 hours per year. Although the engine appears to have a catalytic oxidizer, the company claims there isn't one. Therefore this condition is not applicable. (Note that there are several CPFs which have housings for catalytic oxidizers in the exhaust pipe, when the oxidizer itself is missing. Also, this facility was originally permitted in 2010 with a much larger engine; re-permitted in 2018 with a small booster engine only. Therefore it is not unreasonable that the catalytic oxidizer housing may be a relic from older equipment now removed.)

Condition IV.1 limits nameplate horsepower of the engine to 325 HP. The engine is relatively small for a natural gas compressor engine, so it may be that horsepower or less. Company documentation claims it is a Caterpillar 3406TA of 325 HP, which would comply with the permit condition.

Condition IV.2 requires add-on control devices be installed and operating properly, if there are any. The company claims there are not, so this condition is not applicable.

Condition IV.3 requires a fuel flow monitoring device. I did not find one during my inspection, but records the company provided include fuel consumption figures. Therefore it appears there is such a device.

Condition VI.2 requires monitoring and recording fuel consumption. This is on the included emission summary sheet. This complies with the permit condition.

Condition VI.3 requires a maintenance log. An example sheet of this log is attached. This complies with the permit condition.

Condition VI.4 requires recording hours of operation without the add on control device, if there is one. The company claims there is not, so this condition is not applicable.

Condition VI.5 and 6 require monthly and 12 month NOx and CO emission calculations. These are on the attached emission summary sheet. This complies with the permit conditions.

Condition VIII.1 sets stack dimensions as a maximum diameter of 12 inches and a minimum height of 38 feet above ground. The stack appears to meet these conditions. In my opinion the stack appears oversized for the current engine; therefore it may be left over from a larger engine previously installed here.

**COMMENTS:**

A well at the facility site is labeled Riverside Energy Michigan LLC / 231-995-4000 989-705-7665 / Miller C 3-45 SWD C3-23 Sub / Permit # 46613 / T30NR1E Sec 23 NE 1/4 NW 1/4 SE 1/4 / Vienna Twp Montmorency Co.

The engine was a small natural gas fired engine. It had an AFRC control box with an active digital display indicating the AFRC was operating. The engine was running at 1625 RPM. Engine oil pressure was 55 psi, compressor oil pressure 65.

There was a label on the control panel identifying it as "Booster Unit #74342." This number matches the number for the engine given in company documentation for this site.

I did not see a brine tank, but the presence of a well labeled as SWD (Salt Water Disposal) indicates disposal of brine on site is probably ongoing. The small tanks on site I noticed were an oval metal tank near the engine radiator, which is probably a tank for engine coolant; and two small drum on stilts tanks. One of these drum tanks was unlabeled, the other was labeled Chevron HDAX NG Screw Compressor Oil, ISO 150.

Maintenance appeared adequate. I did not see any leaks. I did not see any stained soils that might have suggested past leaks or spills.

NAME William J Rogers

DATE 7/24/19

SUPERVISOR SN