

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

N778240857

FACILITY: Riverside Energy Michigan, LLC - Chester 12 CPF		SRN / ID: N7782
LOCATION: NW SE NE SECTION 12 T30 R2W, CHESTER TWP		DISTRICT: Gaylord
CITY: CHESTER TWP		COUNTY: OTSEGO
CONTACT: Natalie (Natasha) Schrader , Technical Assistant		ACTIVITY DATE: 07/20/2017
STAFF: Bill Rogers	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection for FCE		
RESOLVED COMPLAINTS:		

On July 20, 2017, I inspected the Riverside Chester 12 Facility, also known as Chester 12 Fox. I did not find any violations during my inspection.

I also reviewed records. We do not have a Malfunction Abatement Plan (MAP) on file for this facility. According to Natalie Schrader, Technical Representative, Riverside is developing one; it is complete except for a plant diagram and map they wish to include. Since Riverside has not owned this facility long and they are developing the MAP, I will give them a chance to submit it before sending a Violation Notice. Should the MAP arrive promptly and be acceptable, I will use enforcement discretion and not start enforcement action on this issue.

The maintenance log required to go with the MAP is also missing. As with the MAP, I will hold off on enforcement action on this matter assuming the facility's new owners correct this promptly.

COMMENTS

The facility contains one engine without catalytic oxidizer or other add-on control device; one glycol dehydrator; and some tanks, none of which appear to be of a size or type that would require an air use permit. Riverside took over this facility from O.I.L. recently. The facility is covered by Permit 108-07.

Permit 108-07, Table EUENGINE1, includes the following requirements:

Special Condition 1.1a and 1.1b set NOx and CO limits. NOx is limited to 70 tons per year and CO to 10 tons per year, both based on a 12 month rolling time period as determined at the end of each calendar month. Emission estimates, attached, claim that as of April 2017 the 12 month rolling emissions for NOx were 60.82 tons and for CO 4.34 tons. This complies with the permit conditions.

Condition 1.2 requires a malfunction abatement plan. There is no malfunction abatement plan in our files. I called Ms. Natalie Schrader at Riverside. She reports that they got the facility from O.I.L. about three months ago and there was no MAP in the files. Ms. Schrader reports that the plan is drafted. She is waiting on a plant diagram, site plan, and map she needs to complete it. She will send a draft electronically and submit a formal copy by surface mail when these diagrams and maps are ready. I told her that I would hold on enforcement action for now assuming Riverside sends us a MAP soon.

Conditions 1.3 and 1.4 pertain to engines with an add-on control device. The engine at this facility does not have one, so these conditions do not apply.

Condition 1.5 requires testing if requested by the AQD District Supervisor. AQD has not requested testing.

Condition 1.6 requires a device to monitor and record natural gas usage in EUENGINE1. Fuel usage is included on emission records, attached. Also, while inspecting the facility I found a circular chart recording fuel usage for the engine. This complies with the permit condition.

Condition 1.7 requires required calculations be in an acceptable format. The records attached appear satisfactory, except that there is no maintenance log as yet.

Condition 1.8 requires a log of maintenance activities as required by the MAP. Since the MAP is missing, the maintenance log for the MAP is also missing. Engine log sheets, attached, appear to be adequate for the engine variables normally recorded as part of a MAP. A proper maintenance log would also include records of maintenance and repairs performed, and these are not included.

Condition 1.9 requires keeping a log of hours of operation without an add-on control device, if there is one. There is not, so this condition does not apply.

Condition 1.10 requires monthly fuel use records. These are attached. They comply with the permit condition.

Condition 1.11 requires monthly NOx and CO emission calculation records. These are attached. They comply with the permit condition.

Condition 1.12a sets stack dimensions as a maximum diameter of 12 inches at a minimum height above ground level of 30 feet. Judging by eye, the stack appeared to comply with this permit condition.

Table EUDEHY applies to the glycol dehydrator.

Condition 2.2(b) states "The permittee shall document, to the AQD District Supervisor's satisfaction, that the actual annual average natural gas flowrate to the glycol dehydration unit is less than 85 thousand standard cubic meters per day," or approximately 3 million standard cubic feet per day. Production data, attached, shows that the facility processes about 180,000 standard cubic feet per day. This is sufficient to comply with Condition 2.2(b).

ONSITE INSPECTION NOTES:

The latitude and longitude in our database for this facility are not correct. I took better ones and am submitting them to our database for future use.

The facility includes one medium sized natural gas fired compressor engine with no add-on control device. It exhausts through the side of the building to a horizontal muffler, then through an elbow to exhaust unobstructed vertically upward.

The engine is labeled GCS 821-0 in metal characters welded to the engine mount. This designation matches the unit number written on the engine data sheets, attached.

I found a box with a digital display on the outside of the compressor shed. It appeared to have a readout for fuel. There was also a circular chart labeled "fuel" inside the compressor shed, near the engine.

The engine was operating at the time of my inspection. According to its instrument panel it was running at 1146 RPM. Engine oil pressure was 68 psi, compressor oil pressure was 60 psi, engine water temperature was 195 degrees f.

The facility included a second compressor engine not included in the permit. It is a small "booster" sized engine, a bit larger than a pickup truck engine. It appears to be small enough not to require a permit. It was labeled as GCS 1038 in metal letters welded to the engine mount. It was running at 1316 RPM. Engine oil pressure was 57 psi, compressor oil pressure was 58 psi, engine coolant temperature was 190 degrees f.

This engine exhausted sideways through the wall to a horizontal muffler, then through a pipe elbow and through a second, vertical muffler. A second pipe elbow then directed the exhaust to horizontal again. Exhaust diameter is about 4 inches at about 15 feet above ground level.

There is a glycol dehydrator. The burner plate is weathered and basically unreadable. It had "100,000" stamped in it; this is likely the burner heat capacity in BTU per hour. The burner stack is perhaps 20 feet tall and 5 inches diameter, terminating in a T shaped cap. The dehydrator still vent is about 2 inches diameter at a height of 14 feet above ground, ending in a T shaped fitting.

There was no opacity from any equipment on site except water droplet "steam" from the dehydrator still vent. There were moderate glycol odors downwind of the glycol dehydrator. I did not notice any other odors. There were no unusual noises or vibrations. I saw a small area of oil-stained soil, near a bucket with oil in it, near the small compressor engine. This spilled oil was inside the compressor shed.

Tanks on site included:

One 400 barrel tank inside a lined berm. It was the size of a brine tank, but was labeled HCL-Acid.

Inside the compressor shed near the large compressor engine, one 300 gallon drum on stilts tank labeled Chevron HDAX 5100 Ashless Gas Engine Oil.

Outside, near the glycol dehydrator, two 300 gallon drum on stilts tanks, one labeled methyl alcohol and one labeled triethylene glycol.

Near the smaller compressor, three small drum on stilts tanks. One labeled Chevron Ursa Super Plus EC SAE 15W-40, one Chevron Hydraulic Oil AW ISO 46, and one Chevron HDAX 5100 Ashless Gas Engine Oil.

Maintenance appeared fair.

NAME William J Rogers Jr

DATE 7/28/17

SUPERVISOR SN

