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

N825753332

FACILITY: RIVERSIDE ENERGY MICHIGAN, LLC - X-REA CPF		**SRN / ID:** N8257
LOCATION: T31N R4E SEC 26 SW 1/4 NW 1/4 SW 1/4, HILLMAN		**DISTRICT:** Gaylord
CITY: HILLMAN		**COUNTY:** MONTMORENCY
CONTACT:		**ACTIVITY DATE:** 04/10/2020
STAFF: Bill Rogers	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On April 10, 2020, I inspected the Riverside Michigan Energy LLC X-Rea facility. I didn't find any violations during my inspection. This facility is covered by Permit to Install No. 78-09, issued May 21, 2009.

The facility is located west of M-32, south of Hillman. There is a paved road heading west, leading to the parking lot of the Hillman Schools; it is unpaved beyond the entrance to the school parking lot. The X-Rea facility is at the west end of this unpaved section of road. There is no special difficulty in reaching the facility.

Permit 78-09, Table EUENGINE1, Condition IV.1, states that any add on control device must be installed and operating properly. The engine has a catalytic oxidizer. It appeared to be installed and operating properly. Temperature readings recorded on the clipboard hanging near the control panel indicated that catalyst inlet temperature was 947 degrees f and outlet was 1010 degrees f the day before my inspection. A temperature rise across the catalytic oxidizer indicates pollutants are being burned inside it, and suggests that the device is operating properly.

Condition IV.2 states that a device to measure engine fuel use must be operating. Records that Riverside submitted, reviewed in a previous report, included fuel use numbers. This suggests there is a device to measure fuel use. In addition, I found an electronics box on the outside wall of the compressor shed which bore a penciled note about which recorded value was facility fuel. However, the digital display on that box was not operating. Therefore I could not confirm that fuel use was being recorded at the time of my inspection.

Condition VIII.1 sets dimensions for the engine exhaust stack as a maximum diameter of 12 inches at a minimum height of 37.6 feet above ground level. The stack appeared to be 12 inches in diameter. I paced out the length of the stack's shadow and compared it to the length of my own shadow to estimate the stack height. I found the stack to be approximately 40 feet tall. It appears that the stack complies with the permit condition.

Table FGFACILITY, Condition II.1 prohibits burning sour gas at the facility. I did not see or smell anything that would make me suspect that sour gas was being burned at the facility.

COMMENTS

The facility includes one Caterpillar natural gas fired engine driving a compressor. The engine is identified as Unit 767 with an adhesive label on the instrument panel box. The engine has a catalytic oxidizer.

The engine was running at the time of my inspection. It was running at 1118 RPM. Engine oil pressure was 60 psi. Compressor oil pressure was 60 psi. Engine coolant temperature was 200 degrees f.

There was a facility log on a clipboard hanging near the instrument panel. It said that the catalyst inlet temperature was 947 f and outlet was 1010 f on the day before my inspection.

The engine exhaust leaves through the side of the shed to a horizontal muffler. Then the pipe bends to go to a tall stack exhausting unobstructed vertically upward. There was no opacity in the engine

exhaust.

The facility includes a glycol dehydrator. The builder's plate on the dehydrator burner was painted over, so I couldn't read it. However the burner is of about the same size as 125,000 to 200,000 btu per hour burners I have seen at other facilities. The burner vent was about 6 inches diameter and exhausted unobstructed vertically upward at a height of about 24 feet above ground level. The still vent was a pipe about two inches in diameter coming out the side of the compressor shed about 10 feet above ground level. It ended in a T fitting. The reboiler shell had a builder's plate; if I read this correctly it said the device had been built in 1/94.

The facility did not have a brine tank.

Tanks on site included:

300 gallon drum on stilts methanol tank over a wooden berm structure under the roof overhang near the radiator end of the compressor shed.

An oval metal tank over a wooden berm structure under the opposite roof overhang near the radiator end of the compressor shed, probably engine coolant.

Inside, near the engine, two 300 gallon drum on stilts tanks. One was labeled Chevron HDAX 3100 Ashless Gas Engine Oil SAE 40. The other Chevron Regal R&O ISO 100 oil. On the floor near the engine there were also two orange painted used oil tanks.

I did not see any leaks or spills. I did not see any stained soils which would make me think there had been leaks or spills in the recent past. I did not notice any opacity or odors on site. Maintenance appeared to be adequate.

NAME _____ DATE _____ SUPERVISOR_____

William Rogers Digitally signed by William Rogers Date: 2020.04.22 12:00:41 -04'00'

Shane Nixon Digitally signed by Shane Nixon Date: 2020.04.22 12:01:24 -04'00'